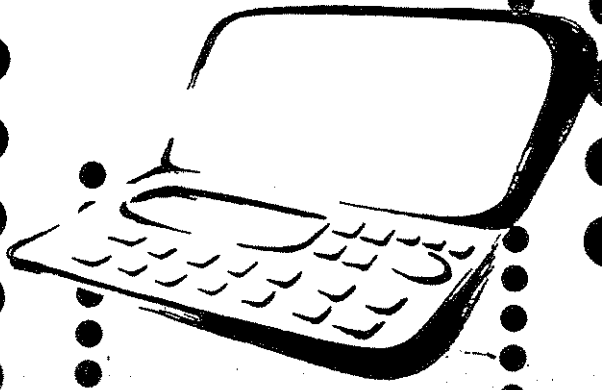
SF-4400/ SF-4600B

Owner's Manual



CASIO

GUIDELINES LAID DOWN BY FCC RULES FOR USE OF THE UNIT IN THE U.S.A. (not applicable to other areas).

NOTICE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communicaions. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC WARNING

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Proper connectors must be used for connection to host computer and/or peripherals in order to meet FCC emission limits.

Connector	SB-62	SF Unit to SF Unit
Connector	FA-120 (Version 3.50d)	SF Unit to PC for IBM Machine

Congratulations on your selection of CASIO's new SF-4400/SF-4600B (referred to as SF Unit in this manual). This innovative new personal data management tool features a selection of powerful functions, including:

- Telephone Directory
- Memo Mode
- Schedule Keeper
- Reminder Mode
- Copy Function
- Secret Function
- Calendar
- Clock with Home Time and World Time functions
- Calculator
- Poker Game

Functions are specially designed to be easy to understand and use, making your personal data management easier than ever before.

- All data stored in memory is erased if the SF Unit should malfunction, when you have it repaired, when the batteries go dead, and whenever you remove the batteries. ***Be sure to make written back up copies of all important data.***

- CASIO COMPUTER CO., LTD. assumes no responsibility for any damage or loss resulting from the use of this manual.
- CASIO COMPUTER CO., LTD. assumes no responsibility for any loss or claims by third parties which may arise through the use of the SF Unit.
- CASIO COMPUTER CO., LTD. assumes no responsibility for any damage or loss caused by deletion of data as a result of malfunction, repairs, or battery replacement. Be sure to back up all important data on other media to protect against its loss.

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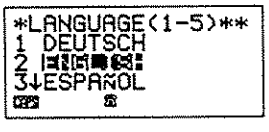
Multiple Language Capability

Your SF unit is capable of producing messages in any one of five different languages (English, German, French, Italian, Spanish). Use the following procedure to select the language you want.

To select the system language

1. Press **ON** to switch power on.
2. Enter the Telephone Directory Mode.
- You could enter Memo, Reminder, Schedule Keeper, Calendar, Home Time or World Time here.
3. Press **FUNC** three times to display the third function menu.
- In the Calendar, Home Time, or World Time mode, press **FUNC** twice to display the second function menu.
4. Press **1** to select "LANGUAGE".
- The above operation causes a list of five languages to appear on the display. The language that is currently selected is highlighted on the display.
5. Select the language you want to use.
- You can directly specify a language by pressing the number key that corresponds to the language you want to use.



- You can also select a language by using △ or ▽, to move the highlighting around the menu until the language you want to use is highlighted. Each time you move the highlighting, the title LANGUAGE (1-5) at the top of the screen changes to the language that is currently highlighted.

6. While the language you want to use is selected (highlighted), press **SET**.
- To exit the language-selection menu without changing the current language, press **ESC**.
- The system language automatically changes to English whenever you perform the RESET operation (page 96).

About this manual...

This manual is divided into 8 parts.

PART 1 Getting Started

Be sure to read this part of the manual before doing anything else! It includes important information that you need to know in order to use the SF Unit correctly. It also helps you to get acquainted with the keys, features, and functions of the SF Unit. It tells you where everything is located, what the display indicators mean how to adjust the display contrast, and other important information.

PART 2 Operation Reference

This part of the manual gives you more detail about the fundamental operation of the SF Unit. It provides all of the detail you need to help you use the SF Unit to its full potential.

PART 3 Data Management Functions

This part of the manual details the versatile data management functions of the SF Unit. It describes the procedures required for data storage, recall and editing in the Telephone Directory, the Memo Mode, and the Schedule Keeper.

PART 4 Timekeeping Functions

Your SF Unit includes powerful timekeeping functions that help to keep you on time all the time. The Home Time function lets you set the current time for your home, specifying 12-hour or 24-hour format, standard time or summer time, even your hometown name. The World Time function gives you instant access to the current time in any one of 29 time zones around the globe.

PART 5 Calculator Functions

The SF Unit also gives you the capability to perform all of the mathematical operations available on today's calculators. In addition, you also get an innovative date calculation function that makes it possible to perform addition and subtraction operations that involve dates.

PART 6 Poker Game

This part of the manual tells you how to play the poker game that is built into the unit.

PART 7 Data Communications

The data communications capabilities of the SF Unit let you transfer data between two SF Units, or between the SF Unit and a personal computer.

PART 8 Technical Reference

This part of the manual provides technical information on troubleshooting, user maintenance, specifications, etc.

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PART 1

Getting Started

Read this first!

You must be familiar with the following information in order to use the SF Unit correctly. It tells you what to do in order to avoid losing important data stored in memory. Please be sure to read the following before using the SF Unit!

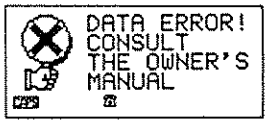
Make back up copies of important data!

Your SF Unit employs electronic memory, which makes it possible to store large volumes of data and to recall stored data quickly and easily. Data is retained as long as power is supplied by the batteries. This means that should batteries go dead, or if you make a mistake while replacing batteries, the data stored in memory may be damaged or lost entirely. Data contents can also be damaged or lost due to strong electrostatic charge, strong impact, or extremes in temperature and humidity.

All of this means that you should make back up copies of important data in a notebook in case any of the above conditions occur.

About data errors...

Whenever you switch on the power of the SF Unit, it performs a self-check before beginning operation. If the SF Unit detects a problem with the data stored in memory, it displays the following message.



Note that once data is lost it cannot be recovered. Such data errors are generally caused by one of the following problems.

- Interruption of battery power.
- Severe electrostatic charge, impact, change in temperature, or change in humidity.
- Hardware problem.

Once the Data Error display appears, you will not be able to input or edit data, though you will be able to recall data after pressing **CLEAR** to clear the error message. In order to return memory to normal (allowing further input and editing of data), you must perform the RESET operation to clear the memory of all data. Before doing so, you may want to recall important data and write it down (if you don't already have a copy). You can then re-input the data after clearing the memory.

If you still have trouble after trying the RESET operation, you may have a hardware problem. If so, consult with your nearest CASIO dealer.

About the memory overflow message...

The memory overflow message appears on the display when the data you are trying to store exceeds memory capacity.

When this happens, perform the two following operations.

- Press ◁ or ▷ to display the data you are trying to input, and reduce the number of characters. If the memory overflow message appears again when you try to store the data, try the next operation below.
- Press **CLEAR** to display the input prompt for the mode you are in ("NAME?" "MEMO?"). Next, delete data items you no longer need to make room for the new data.

General Precautions

- Never try to take the SF Unit apart.
- Avoid strong impact and sudden temperature changes.
- At very low temperatures, the display response time may slow down or the display may fail completely. This is temporary and correct operation should return at normal temperature.
- To avoid serious damage to the SF Unit caused by leaking batteries, replace batteries once every two years, regardless of how much you use the SF Unit during that time.
- Never use thinner, benzine or other volatile agents to clean the exterior of the SF Unit. Instead, wipe it off with a soft cloth dampened in a solution of water and a mild, neutral detergent. Wring the cloth out until it is almost dry.

- If the SF Unit is exposed to strong static electrical charges, the display may dim or the SF Unit may lock up. To correct this situation, switch power off, and then remove and then replace the batteries.
- Do not press the keys with a pen, pencil or other sharp object.
- The SF Unit may cause interference with radio or television reception. Keep it away from such appliances when you are using it.

About the Power Supply

The SF Unit is powered by two CR2032 lithium batteries.

About battery life

Replace batteries as soon as possible whenever you notice either of the following:

- No display when you switch power on.*
- Dimming or failure of the display during operation.
- Very cold temperatures (below 5°C) may affect the lithium batteries and cause the unit to fail to switch on. In this case, correct operation should resume once the unit rerurns to normal temperature.

Caution

- **All data stored in memory is lost if you remove both batteries at the same time.**
- **Be sure that you keep a separate copy of all important data that you store in the SF Unit.**

Battery Precautions

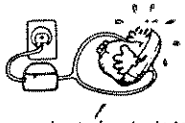
Incorrectly using batteries can cause them to burst or leak, possibly damaging the interior of the SF Unit. Note the following precautions.

- Be sure that the positive (+) side of each battery is facing up (so you can see it).

- Never mix batteries of different types.

- Never mix old batteries and new ones.

- Never leave dead batteries in the battery compartment.
- Remove the batteries if you do not plan to use the SF Unit for a long period.
- Replace batteries at least once every two years, no matter how much you use the SF Unit during that period.
- Never try to recharge the batteries supplied with the SF Unit.

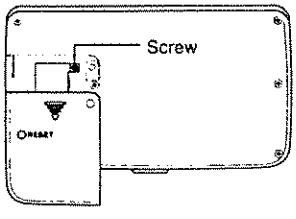


- Do not expose batteries to direct heat, let them become shorted, or try to take them apart.

Keep batteries out of the reach of small children. If swallowed, consult with a physician immediately.

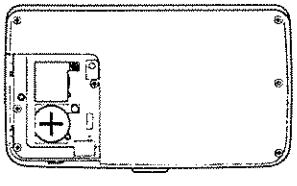
To replace the batteries

1. Loosen the screw on the back of the SF Unit that holds the battery compartment cover in place, and remove the cover.
2. Loosen the screw that secures one of the two battery holders in place and remove the battery holder.



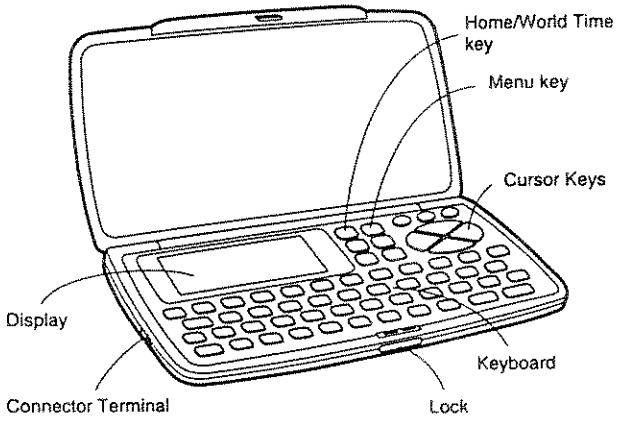
Caution
Be sure to remove only one battery at a time.
Otherwise, you will lose all data stored in memory.

3. Replace the old battery with a new one, making sure that the positive (+) side of the new battery is facing up (so you can see it).



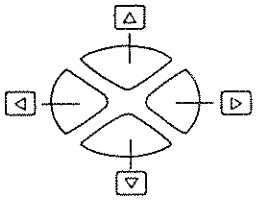
4. Replace the battery holder and secure it by tightening its screw.
   - Be careful that you do not over tighten the screw.
5. Repeat steps 2 through 4 for the other battery.
   - Be sure to replace both batteries. Never mix old batteries with new ones, and be sure to use CR2032 lithium batteries only.
6. After you replace all two batteries, replace the battery compartment cover and secure it by tightening its screw.
   - Be careful that you do not over tighten the screw.

General Guide



About the cursor key...

The cursor key itself is not actually marked with arrows. To make the explanations in this manual as easy to understand as possible, however, we will refer to specific cursor keys as noted in the illustration below.



Setting Up the SF Unit

After batteries are loaded, use the following procedures to set up the SF Unit for operation.

■ To switch power on and off

1. Press **ON** to switch power on.
- The initial screen for the mode that was selected when you last switched power off appears on the display.
- If the data error message appears on the display, follow the procedures described on page 10.
- If nothing appears on the display when you switch power on, replace batteries as soon as possible.

2. Press **OFF** to switch power off.

About the Auto Power Off function...

The SF Unit is equipped with an Auto Power Off function that switches power off automatically whenever you do not perform any key operation for about six minutes. To restore power, press **ON**.

■ To adjust the display contrast

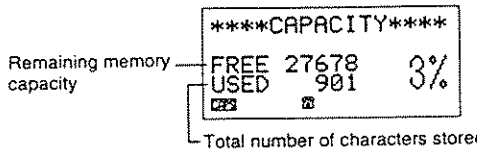
1. Enter the Telephone Directory Mode.
- You could enter any mode except the Calculator mode here.

2. Press **SHIFT** and confirm that the "S" indicator is on the display.
3. Press **CONT**.
4. Use the ◁ and ▷ keys to adjust the contrast.

5. After you are finished, press **ESC** to clear the contrast adjustment display.

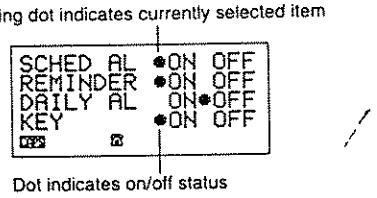
■ To check the memory status

Hold down **SHIFT CAPA** to display a screen that shows the current memory status. To clear the memory status display, release **CAPA**.



About the SOUND menu...

The sound menu lets you switch the key input tone and the various alarms of the SF Unit on and off.



The on/off status of each SOUND menu items is indicated by a dot, and the dot that is flashing on the menu is the one that is currently selected. Use △ and ▽ to change the currently selected (flashing) item. Use ◁ and ▷ to switch the currently selected item on and off.

■ To switch the key input tone on and off

1. Press **FUNC** once to display the first function menu.
2. Press **4** to select the SOUND menu item.
3. Use △ and ▽ to select KEYS.
4. Use ◁ and ▷ to switch the key input tone on and off.
5. Press **SET** to store your setting and clear the SOUND menu.

■ To display the main menu screen

Press **MENU** to display the main menu screen.

Main Menu Screen

Menu Icons

① Telephone Directory Mode
② Memo Mode
③ Reminder Mode
④ Schedule Keeper Mode
⑤ Calendar Mode
⑥ Calculator Mode
⑦ Game Mode

To change modes

You can change modes either by selecting an icon or by inputting a number.

● To change modes by selecting an icon

1. Display the main menu screen.
2. The icon of the currently selected mode is highlighted on the display. Use △, ▽, ◁, and ▷ to change the selected menu icon.
3. When the icon for the mode you want is selected (highlighted), press **SET**.

● To change modes by inputting a number

1. Display the main menu screen.
2. Input a number from 1 to 7 to specify the mode you want to enter.

- To enter the Timekeeping Mode, press **HOME/WORLD**. You cannot select this mode from the main menu screen.
- Note that whenever you switch power on, the initial screen that appears is not the main menu screen, but rather the mode that you were in when you last switched power off.

Inputting Letters, Numbers, and Symbols

The following describes the basic input operations for the SF Unit. Note that you can use the following operations to input data only in the Telephone Directory, Memo Mode, and the Schedule Keeper. In all of the following operations, the input or correction is performed at the current cursor location. To move the cursor around the display, use the △, ▽, ◁, and ▷ cursor keys. Press **SHIFT** and then ◁ to make the cursor jump to the first character of an entry, or **SHIFT** ▷ to jump to the end of an entry.

Note

The maximum number of characters you can input for each data item is 384. When the number of characters you are inputting in the current data item exceeds 374, the shape of the cursor changes from "_" to "▮". This indicates that you can input 10 more characters in the current data item.

■ To input letters and numbers

Press the key that is marked with the letter or number that you want to input.

■ To input upper-case letters

Press **CAPS** to switch the keyboard between upper-case and lower-case letters. The indicator "CAPS" on the display shows that the keyboard is shift-locked for upper-case letters.

- The upper-case/lower-case setting you make with **CAPS** remains in effect until you change it, even when you switch the SF Unit off.
- A shift-lock operation using **CAPS** affects the letter keys only. It does not shift the number keys for punctuation symbol input.

■ To shift the keyboard

Press **SHIFT** to temporarily shift the keyboard between upper-case and lower-case letters. The indicator "S" on the display shows that the keyboard is shifted.

- If the keyboard is shift-locked for upper-case input, pressing **SHIFT** shifts to lower-case. If the keyboard is set for lower-case letters (by the **CAPS** key), pressing **SHIFT** changes to upper-case.
- With **SHIFT**, the keyboard remains shifted for input of one character only. As soon as you input one character, the keyboard switches back to the status set by **CAPS**.

■ To input punctuation

Press **SHIFT** to temporarily shift the keyboard for input of the punctuation symbols marked above the number keys. The indicator "S" on the display shows that the keyboard is shifted.

- The keyboard remains shifted for input of one punctuation symbol only.

■ To input accented characters

Press the **ACC** key and confirm that the "ACC" indicator is on the display. Next, input the character. The following character accents are available.

- Umlaut (Ë) ..... **ACC Z**
- Acute Accent (É) ..... **ACC X**
- Grave Accent (È) ..... **ACC C**
- Circumflex (Ê) ..... **ACC V**
- Tilde (ñ) ..... **ACC B**

■ To input other symbols

1. Press **SMBL** to display a menu of numbered symbols on the bottom of the display.
- There are a total of 7 symbol menu screens.
- To clear the symbol menu from the bottom of the display without inputting a symbol, press **ESC**.
2. Use △ and ▽ to scroll through the symbol menu screens until the one that contains the symbol you want appears on the display.
3. Press the number key (**1** thru **8**) that matches the number to the left of the symbol you want to input. The symbol is input at the current cursor position and the symbol menu is cleared from the bottom of the display.

■ To change one character to another

1. Move the cursor to the location of the character you want to change.
2. Input the character you want to change to.

■ To delete a character

1. Move the cursor to the location of the character you want to delete.
2. Press **DEL**.
- The character at the cursor location is deleted, and the space is filled in by sliding to the left any characters right of the cursor.

■ To insert characters

1. Move the cursor to the location of the insertion.
2. Press **INS**.
- Each press of **INS** opens up a space at the cursor location, sliding to the right any characters to the right of the cursor. Open up as many spaces as you need.
3. Input the characters you want in the space.

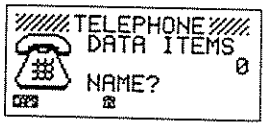
PART 3

Data Management Functions

This part of the manual describes how to input and store data in the Telephone Directory, Memo, Schedule Keeper and Reminder Modes. It also describes how the Calendar Mode can be used in combination with the Schedule Keeper Mode.

To enter a mode

1. Press **MENU** to display the main menu screen.
2. Use the cursor keys to highlight the icon for the mode you want to enter.
- Instead, you could also input the number that corresponds to the mode you want to enter.
3. Press **SET** to enter the selected mode.
- When you enter the Telephone Directory, Memo Mode, or Reminder Mode, an initial screen appears on the display.



<Initial display for the Telephone Directory>

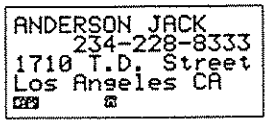
In the case of the Schedule Keeper, the index display (see "About display formats" for further information on index displays) for the current date appears first.

About display formats

There are two display formats used in the Telephone Directory, Memo Mode, Schedule Keeper and Reminder Mode: a data display format and an index display format. The data display shows all of the data entries contained in a data item, while an index display abbreviates each data item into one or two lines. The index display makes it possible to quickly scroll through data items to find the one that you want.

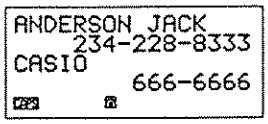
You can switch between the data display and index display formats at any time by pressing **DISP CHNG**.

Data Display



You can scroll through a data display line-by-line using the △ and ▽ cursor keys. If you press **SHIFT** before △ and ▽, the display scrolls data item-by-data item.

Index Display



You can scroll through an index display data item-by-data item using the △ and ▽ cursor keys. If you press **SHIFT** before △ and ▽, the display scrolls two data items at a time.

Using the Telephone Directory

The innovative Telephone Directory mode of the SF Unit lets you input names, telephone numbers, and addresses for instant look up when you need them. It even gives you a total of six user-definable items that you can use to record birthdays, hobbies, or any other information you want. Each Telephone Directory data item can contain up to 384 characters (including next and newline symbols).

About Telephone Directory data items and data entries...

Telephone Directory information is stored in units called data items. Each data item is made up of a number of data entries. Telephone Directory data items are made up of the following nine entries:

NAME	FREE 1	FREE 4
NUMBER	FREE 2	FREE 5
ADDRESS	FREE 3	FREE 6

The "FREE" entries can be used for the storage of any type of data you want. You can even change the FREE entry labels to produce the message you want during data input.

Inputting Telephone Directory data

Use the following procedure to input Telephone Directory data.

Notes

- Before trying to perform the following procedure, be sure to first read Part 2 of this manual, titled "Inputting Letters, Numbers, and Symbols." Make sure you are familiar with the basics of character input and editing before proceeding.
- Telephone Directory data is automatically sorted according to name entries. See "Auto Sort Sequence" for information on how this unit sorts data.
- For information on searching for and recalling data already stored in memory, see "Recalling data stored in memory."
- For information on editing, deleting and copying data already stored in memory, see "Editing, Deleting, and Copying data."

To input Telephone Directory data

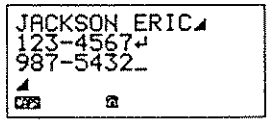
Example: To input the following data.
Name: ERIC JACKSON
Phone Number: 123-4567, 987-5432
Address: 570 Casio Avenue Seattle WA

1. Enter the Telephone Directory Mode. At this time, you could press CLEAR to clear the initial Telephone Directory screen and change to the name input screen.

Prompt for name input

2. Input the name last name first, since the data is sorted according to the name entry.
3. Press ▽. The separator mark ◢ is inserted at the end of the line, and the "NUMBER?" prompt appears to ask you to input the telephone number.

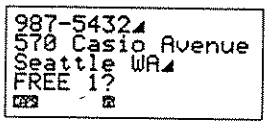
4. Input the telephone number.



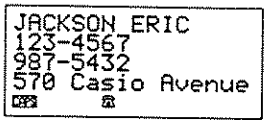
5. After inputting a telephone number, press ▽ to advance to address input.

6. Input the address.
- The display scrolls automatically as you input more data.

7. After inputting an address, press ▽ to advance to the FREE input.



8. Input any other information you want.
9. After inputting all of the data you want, press SET to store it in memory.

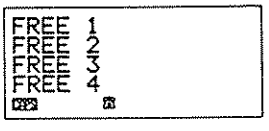


- You can press SET at any point in the above procedure to store the data you have input up to that point.

To change a FREE entry label

1. Enter the Telephone Directory Mode.
2. Press FUNC twice to display the second function menu.
- The labels you create appear as prompts when you are inputting Telephone Directory data.

3. Press 3 to select LABEL EDIT.
- To clear the function menu without selecting anything, press ESC.



4. Use △ and ▽ to move the cursor between the FREE labels.
- To cancel the editing operation without making any changes, press ESC or CLEAR.

5. When the cursor is located at the text you want to change, enter the text you want.
- Labels can be up to 14 characters long.

6. After making the changes you want, press SET to store them.

Using the Memo Mode

The Memo Mode of the SF Unit is like a pad of electronic memo paper that lets you store information in any format you want. You can input Memo Mode data by adding new memos to end of data already in memory, or you can insert new memo data between two existing Memo Mode data items. Each Memo Mode data item can contain up to 384 characters (including newline symbols).

To input Memo Mode data

1. Enter the Memo Mode. At this time, you could press **CLEAR** to clear the initial Memo Mode screen and change to the memo input screen.

2. Input the first line of memo data you want to store.
- Note that the first line of memo data is treated as the memo's name. Because of this, it is a good idea to use a short descriptive title as the first line.

3. Input the rest of your data.

4. After inputting all of the data you want, press **SET** to store it in memory.

Notes

- For information on searching for and recalling data already stored in memory, see "Recalling data stored in memory."
- For information on editing, deleting and copying data already stored in memory, see "Editing, Deleting, and Copying data."

To insert a new Memo Mode data item between two items in memory

1. Enter the Memo Mode.
2. Recall the data item you want to come after the new data item you are about to input, and move the name of the data item into the top line of the display. (See "Recalling data stored in memory" on page 45)
3. Input the new data item.
4. Press **SHIFT SET** to store the new data item.

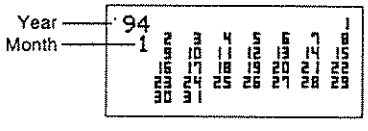
- If you press **SET** without pressing **SHIFT**, the new data item is automatically stored at the end of the data already existing in memory.

Using the Calendar

The calendar is pre-programmed to display full-month calendars of any month from January 1901 through December 2099.
You can enter 20th century years using only two digits (94 → 1994). 21st century years must be entered in four digits.
Helpful markers appear on the calendar display to show you for what days during the month you have appointments scheduled.

To display the calendar

To enter the Calender Mode, select the Calendar Mode icon from the main menu screen.



- The dates on each calendar are shown starting from Sunday (on the far left) through Saturday (on the far right).
- The above procedure displays the calendar that contains the date currently set in the Home Time display.
- If you enter the Calendar Mode while the Home Time display is shown, the calendar appears with the current date flashing within the calendar.
- When you enter the Calander Mode right after you are in the Schedule Keeper, the calendar that contains the Schedule Keeper date you were viewing appears. In this case, the Schedule Keeper date you were viewing appears flashing within the calendar.

To scroll through calendars

1. Enter the Calendar Mode.
2. Use the △ and ▽ cursor keys to scroll sequentially through the calendars. Holding down either key scrolls at high speed.

- The above procedure works only when the date cursor is not flashing in the calendar. To clear the date cursor from the calendar, press **ESC**.

About the date cursor.....

- The date cursor flashes at a date in a calendar to indicate that the date is selected.
- If a calendar is already shown on the display, press the ▷ cursor key to make the date cursor appear at the first date in the calendar, or the ◁ cursor key to make it appear at the last date in the calendar. You can also make the date cursor appear at any specific date within a displayed calendar by entering that date. For example, pressing **1 2** causes the 12th to start flashing in the displayed calendar.
- You can move the date cursor around the calendar using the △, ▽, ◁, and ▷ cursor keys. If you press the ◁ cursor key while a far left date (Sunday) is selected, the date cursor moves up one line, to the far right date (Saturday). If you press the ▷ cursor key while a far right date (Saturday) is selected, the date cursor moves down one line, to the far left date (Sunday).
- If you press the △ cursor key while a date in the top line of a calendar is selected, the display changes to the previous month, with the date cursor located in the bottom line. If you press the ▽ cursor key while a date in the bottom line of a calendar is selected, the display changes to the following month, with the date cursor located in the top line.
- Holding down any of the cursor keys moves the date cursor at high speed.
- To clear the date cursor from a calendar, press **ESC**.

To display a calendar from the Calculator

1. Enter the Calculator mode.
2. Input the year, press **DATE/TIME** and then input the month of the calendar you want to display. Finally, press **MENU** and select Calendar Mode icon.

To specify a month for display in the Calendar mode

1. While a calendar is displayed, press **CLEAR**.
2. Input the year of the calendar you want to display and press **DATE/TIME**.
3. Input the month of the calendar you want to display.
4. Press **MENU** and then press **SET**. The calendar for the month you specified is displayed.

To specify a month and date for display in the Calendar mode

1. While a calendar is displayed, press **CLEAR**.
2. Input the year of the calendar you want to display and press **DATE/TIME**.
3. Input the month of the calendar you want to display and press **DATE/TIME**.
4. Input the date and press **DATE/TIME** to display the calendar for the month you specified. The date cursor is flashing within the calendar at the date you specified.

To highlight and unhighlight specific dates

1. Enter the Calendar Mode.
2. Display the calendar that contains the date you want to highlight.
   - You can either scroll through calendars using △ and ▽, or you can specify the month.
3. Use the date cursor to select the date that you want to highlight.
4. Press **SET** to highlight the date currently selected by the date cursor.
   - To unhighlight the date, press **SET** again.
5. After you highlight the dates you want, press **ESC** to clear the date cursor from the calendar.

To highlight days of the week for multiple months

1. Enter the Calendar Mode.
2. Display the calendar from where you want highlighting to start.
   - You can either scroll through calendars using △ and ▽, or you can specify the month.
3. Press **FUNC** twice to display the second function menu.
4. Press **3** to select MULTIPLE HL.
   - To clear the function menu without highlighting anything, press **ESC**.
5. Input the year of the calendar where you want the highlighting to end and press **DATE/TIME**.
6. Input the month of the calendar where you want the highlighting to end and press **DATE/TIME**.

SUN flashes because it is selected.

```
SUN MON TUE WED
THU FRI SAT
    PRESS(SPACE)
```


7. Use the cursor keys to select the day of the week you want to highlight.
8. Press **SPACE** to specify the currently selected day of the week for highlighting.
   - When a day of the week is specified for highlighting, its abbreviation appears highlighted (reverse field) on the display.
9. After specifying all of the days of the week you want highlighted during the period you specified in steps 2 through 5 above, press **SET** to highlight the applicable dates.

To unhighlight all dates in a specific month

1. Enter the Calendar Mode.
2. Display the calendar for the month whose dates you want to unhighlight.
   - You can either scroll through calendars using △ and ▽, or you can specify the month.
3. Press **FUNC** once to display the first function menu.
4. Press **2** to select MONTH DELETE.
   - To clear the function menu without deleting anything, press **ESC**.
5. Press **SET** to clear all highlights from the month you specified in step 2 above or **ESC** to abort the operation without deleting anything.
   - Remember that the delete operation cannot be undone.

To unhighlight all dates up to a specific month

1. Enter the Calendar Mode.
2. Press **FUNC** twice to display the second function menu.
3. Press **2** to select ALL DELETE.
   - To clear the function menu without unhighlighting anything, press **ESC**.
4. Input the year of the calendar where you want the unhighlighting to end and press **DATE/TIME**.
5. Input the month of the calendar where you want the unhighlighting to end and press **DATE/TIME**.
6. Press **SET** to clear all highlights from January 1901 up to the month you specified in steps 4 and 5 above, or **ESC** to abort the operation without deleting anything.
   - Remember that the delete operation cannot be undone.

Using the Schedule Keeper

The Schedule Keeper lets you store data about your appointments to keep you on time all the time. It lets you input the time and a description of your appointment. You can even set Schedule Alarms that remind you when it is time to get ready for your appointments. When you input data for a specific date, a marker appears next to that date on the calendar to let you keep track of your schedule at a glance. Each Schedule Keeper data can contain up to 384 characters, including newline symbols.

To enter the Schedule Keeper from outside Calendar display

Select the Schedule Keeper Mode icon from the main menu screen.
- At this time, the Schedule Keeper screen for the current date set on the Home Time display appears.

To specify a Schedule Keeper date from the Calendar display

1. Select the Calendar Mode icon from the main menu screen.
2. Display the calendar that contains the date whose Schedule Keeper data you want to input or recall.
3. Use the date cursor to select the date whose Schedule Keeper data you want to input or recall.
4. Press **MENU** and select the Schedule Keeper Mode icon to display the Schedule Keeper data for the date you selected on the calendar with the date cursor.

About date and time input.....

When working in the Schedule Keeper, there are a number of procedures that require you to input times and dates. Note the following general guidelines for inputting times and dates.

Times
- The input format you use for the hours depends on the Home Time setting. Use 12-hour format if the Home Time is set for 12-hour format or 24-hour format if the Home Time is set for 24-hour format.
- You do not have to input the minutes if they are "00". The Schedule Keeper automatically assumes "00" as the minutes if you do not input anything.
- If you are using 12-hour time format, press **A** to specify AM or **P** to specify PM.
- All illegal input (26 for the hour, 65 for the minutes) is ignored.

Dates
- Years can be input within the range of 1901 through 2099.
- You can enter 20th century years using only two digits (94 → 1994). 21st century years must be entered in four digits.
- All illegal input (13 for the month, 35 for the date) is ignored.

To specify a Schedule Keeper date while in the Schedule Keeper

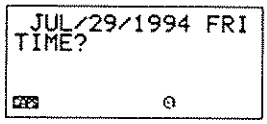
1. Press **SHIFT CLEAR**.
2. Input the year of the date you want to display and press **DATE/TIME**.
3. Input the month of the date you want to display and press **DATE/TIME**.
4. Input the date and press **DATE/TIME** to enter the Schedule Keeper with the display showing the date you specified.

About Schedule Keeper data and initial displays.....

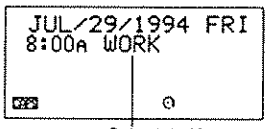
Schedule Keeper information is stored under dates, with each date acting as a unit called a data item. Each data item is made up of a number of data entries.

In the Schedule Keeper, the appearance of the currently displayed date depends on whether or not Schedule Keeper data is already stored under that date.

No data stored



Data already stored (Index Display)



Schedule Keeper data entry

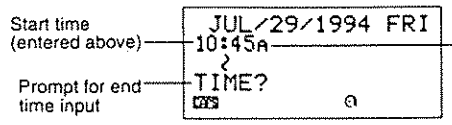
In the case of the display on the right (data already stored), you can display the "TIME?" prompt by pressing **CLEAR**.

To input Schedule Keeper data

1. Enter the Schedule Keeper and display the date for which you want to input data.
2. Press **CLEAR**.
- You can skip this step. If the currently displayed Schedule Keeper date does not already contain data, the "TIME?" prompt is displayed automatically. Even if the Schedule Keeper date already contains data, the display changes to an input screen as soon as you enter numbers or letters.

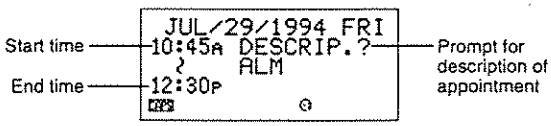
3. Input the starting time of the appointment, pressing **DATE/TIME** between the hour and the minutes.
- To create a Schedule Keeper data entry with a description only (without any start time or end time), press ▷ (to advance directly to step 7) without entering a time.

4. Press **DATE/TIME** again.


Start time (entered above)
JUL/29/1994 FRI
10:45A
TIME?
Prompt for end time input
Indicates AM (displayed in 12-hour format only; "P" displayed for PM)

- To create a Schedule Keeper data entry with a start time and description only (without any end time), press ▷ (to advance directly to step 7) instead of **DATE/TIME**.
- While the above screen is displayed, pressing ◁ returns to the display in step 3 above, and pressing ▷ changes to the display in step 7.

5. Input the ending time of the appointment, pressing **DATE/TIME** between the hour and the minutes.
6. Press ▷.



- While the above screen is displayed, pressing the ◁ cursor key returns to the display in step 5 above.

7. Input a description of the appointment.
- If you want to set a schedule alarm, press ▽ after inputting the description. See "To set a schedule alarm when inputting data".

8. After inputting the data, press **SET** to store it into memory.

Using Schedule Alarms

You can set schedule alarms for Schedule Keeper data entries to help you keep on time for important appointments. When a schedule alarm time is reached, an alarm sounds for 20 seconds and the corresponding Schedule Keeper data appears on the display (even if the SF Unit is switched off). Press any key to stop the alarm and then press **ESC** to return to the display that was shown before the alarm began to sound.

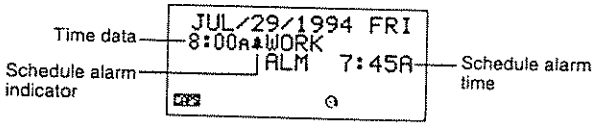
Note the following important points when you are using a schedule alarm.

- The alarm indicator and time are automatically cleared after the alarm time is reached.
- Schedule alarms can only be set for Schedule Keeper data entries that include time data. If you set a schedule alarm for a Schedule Keeper entry with time data and then later clear the time data, the schedule alarm is also cleared automatically.
- If the schedule alarm time is reached during data communications, the alarm does not sound until you complete them.
- The alarm may fail to sound if battery power is too low.
- If the message "SECRET DATA!" appears on the display, it means that a schedule alarm time set in the Secret Area was reached.

To set a schedule alarm when inputting data

1. Enter the Schedule Keeper and input data, using the procedures described in steps 1 through 7 under "To input Schedule Keeper data" on page 36.
2. After inputting the description, press ▽.
- You can press the ▽ without inputting anything for the description.

3. Input the schedule alarm time. Use the ▷ and ◁ cursor keys to move between the hour and minutes setting.



- You can skip this input if you want the schedule alarm time to be the same as that for the schedule data time.
- Whenever the schedule alarm setting is shown on the display, pressing **DEL** clears the alarm time and displays the prompt "ALM TIME?" Input the alarm time using the same procedure described above.

4. After inputting the data, press **SET** to store it into memory.
- Note that the schedule alarm setting is cleared from the display when you press **SET**.

- If you attempt to set a schedule alarm time that is already passed, the message "ALARM TIME ALREADY PASSED!" appears on the display. Then the data is stored without a schedule alarm.
- If you attempt to set a schedule alarm time that is already set for another data entry, the message "ALARM TIME ALREADY USED!" appears on the display. Press **ESC**, ▷ or ◁ to display the schedule alarm to change it.

To switch schedule alarms on and off

1. Press **FUNC**.
2. Press **4** to select the SOUND menu item.
3. Use △ and ▽ to select SCHED AL.
4. Use ◁ and ▷ to switch Schedule Alarm on and off.
5. Press **SET** to store your setting and clear the SOUND menu.

To set or change a schedule alarm for an existing data entry

1. Enter the Schedule Keeper and recall the data for which you want to set or change a schedule alarm. And then press **FUNC 1** to enter the edit mode.
2. Press ▷ until the schedule alarm time appears.
3. Input the schedule alarm time. Use the ◁ and ▷ cursor keys to move between the hour and minutes setting.
- Whenever the schedule alarm setting is shown on the display, pressing **DEL** clears the alarm time and displays the prompt "ALM TIME?". Input the alarm time using the same procedure described above.

4. After inputting the data, press **SET** to store it into memory.
- Note that the schedule alarm setting is cleared from the display when you press **SET**.

To view a data entry's current schedule alarm setting

1. Enter the Schedule Keeper and recall the date whose schedule alarm setting you want to view.
2. Press **SHIFT NEXT** to switch the index display to show the schedule alarm settings for all entries stored under the date you are viewing.
3. Use △ and ▽ to scroll through the entries and view the alarm times.
4. To clear the schedule alarm times, press **SHIFT NEXT** again.

To delete a specific schedule alarm

1. Enter the Schedule Keeper and recall the data for which you want to delete the schedule alarm. And then press **FUNC 1** to enter the edit mode.
2. Press ▽ until the schedule alarm time appears.
3. Press **DEL** to delete the currently set schedule alarm time.
4. After deleting the alarm time, press **SET** to store the entry into memory.

How to find data stored in memory.....

You can recall the schedule from calendar (see "To specify a Schedule Keeper date from the Calendar display") or by specifying a date in the Schedul Keeper mode (see "To specify a Schedule Keeper date while in the Schedule Keeper"). You can also use the index, initial character, or mode search methods to recall data (see "Recalling data stored in memory").

Editing Data

For information on how to edit, delete, or copy data, see "Editing, Deleting, and Copying Data" on page 48.

Using the Reminder Mode

The Reminder Mode helps you keep track of events that occur once a year, once a month, or once a day. You can input a reminder message which appears on the display at preset times. Each reminder can contain up to 384 characters, including newline symbols.

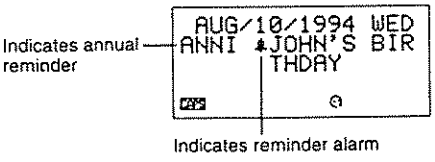
About Reminder Mode data.....

Once you set a reminder, the text that you register along with it appears on the corresponding date in the Schedule Keeper. You can also set reminder alarms that sound at specific times on the corresponding dates to make doubly sure that you don't forget.

There are three types of reminders.

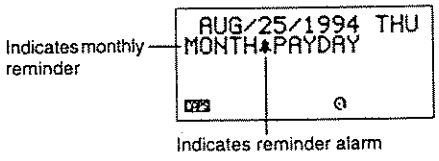
- **Annual reminder**

This type of reminder appears in the Schedule Keeper on the same date every year.



- **Monthly reminder**

This type of reminder appears in the Schedule Keeper on the same date each month.



- **Daily reminder**

This type of reminder does not appear in the Schedule Keeper, but sounds an alarm and displays its messages daily.

About date and time input.....

When working in the Reminder Mode, there are a number of procedures that require you to input times and dates. Note the following general guidelines for inputting times and dates.

Times

- The input format you use for the hours depends on the Home Time setting. Use 12-hour format if the Home Time is set for 12-hour format or 24-hour format if the Home Time is set for 24-hour format.
- You do not have to input the minutes if they are "00". The Reminder Mode automatically assumes "00" as the minutes if you do not input anything.
- If you are using 12-hour time format, press **A** to specify AM or **P** to specify PM.
- All illegal input (26 for the hour, 65 for the minutes) is ignored.

Dates

- All illegal input (13 for the month, 35 for the date) is ignored.

Inputting reminder data

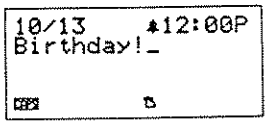
You can use the same procedure to input annual, monthly, and daily events. The type of Reminder data is determined by the date information that you input.

Reminder Type	Month	Date
Annual	Input month	Input date
Monthly	Input: "–"	Input date
Daily	Input: "–"	Input: "–"

To input reminder data

Example: To input the message "Birthday!" as an annual reminder message for October 13.

1. Enter the Reminder Mode. At this time, you could press **CLEAR** to clear the initial Reminder mode screen and change to the month input screen.
2. Input 10 as the month for the annual reminder.
   - In the case of a monthly or daily reminder, you would input **SHIFT SPACE** for the month.
3. Press ▷.
4. Input the date of the reminder.
   - In the case of a daily reminder, you would input **SHIFT SPACE** for the date.
5. Press ▽.
   - If you want to set a Reminder Alarm, you should press ▷ in place of ▽. See "To set a Reminder Alarm when inputting data" for details on setting a Reminder Alarm.
6. Input the reminder message (such as "Birthday!").



7. After inputting the data, press **SET** to store it into memory.

Notes

- For information on searching for and recalling data already stored in memory, see "Recalling data stored in memory."
- For information on editing, deleting and copying data already stored in memory, see "Editing, Deleting, and Copying data."

About reminder alarms.....

You can set reminder alarms that sound at preset times on the dates you specify in a reminder. When a reminder alarm time is reached, an alarm sounds for 20 seconds and the corresponding Reminder Mode data appears on the display (even if the SF Unit is switched off). Press any key to stop the alarm and then press **ESC** to return to the display that was shown before the alarm began to sound.

Note the following important points when you are using a reminder alarm.

- If a reminder alarm time is reached while you are entering or editing the reminder containing that reminder alarm, the alarm does not sound until you complete work (by pressing SET).
- The reminder alarm does not sound if the reminder alarm time is reached during data communications.
- The alarm may fail to sound if battery power is too low.
- If the message "SECRET DATA!" appears on the display, it means that a reminder alarm time set in the Secret Area was reached.

To set a reminder alarm when inputting data

1. Enter the Reminder Mode and input the month and date data you want.
2. After inputting the date, press ▷.
3. Input the reminder alarm time. Input the hour, press ▷, and then input the minutes. Use the ▷ and ◁ cursor keys to move between the hour and minutes setting.
4. Press ▽ and then input a reminder message.
5. After inputting the data, press SET to store it into memory.

To switch reminder alarms on and off

1. Press FUNC once to display the first function menu.
2. Press 4 to select the SOUND menu item.
3. Use △ and ▽ to select REMINDER.
4. Use ◁ and ▷ to switch the reminder alarms on and off.
5. Press SET to store your setting and clear the SOUND menu.

Recalling data stored in memory

The following search capability let you recall data stored in memory quikcly and easily.

- With index search, you scroll through an index display of data items.
- With initial character search, you specify the data item you are looking for by inputting the first few letters of an entry.
- With mode search, you specify the data item you are looking for by inputting characters that might occur anywhere in any one of its entries.

Each of the above search procedures produces an index display of the found data items. You can then use DISP CHNG to switch to the full data display of the data item you want.

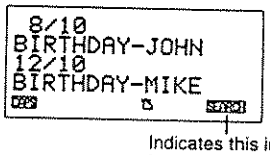
To locate data using index search

1. Enter the mode you want to search.
2. Press △ or ▽ to scroll through the index display. You can also scroll to the next page of items by pressing SHIFT △ or SHIFT ▽.
   - In the Telephone Directory, Memo Mode and Reminder Mode, pressing ▽ when the initial screen of the mode is displayed starts the index display from the first data item, while pressing △ starts from the last data item.
3. When the data item you are looking for is in the top line (second line in the Schedule Keeper Mode) of the display, press DISP CHNG to switch to the full data display.

To locate data using initial character search

1. Enter the mode you want to search.
2. Enter the first few characters of the entry for the data item you want to look for.
   - You can input one or more characters.
   - In the Reminder Mode, you can input a date for the search instead of text. See the notes following this procedure for details.
   - In the Schedule Keeper Mode, you can input a time for the search instead of text. See the notes following this procedure for details.

3. Press SEARCH to start the search. An index display of all data items in the mode whose initial characters match those that you specified appears on the display.



Indicates this index display is result of a search operation.

- To clear the "SEARCH" indicator from the display (and cancel the current search operation), press either ESC or SEARCH. The search operation is also canceled when you change modes, or by any data edit or input operation.
- If no data item matches your specification, the message "NOT FOUND!" appears on the display.
- If there is no data stored in memory, the message "NO DATA!" appears on the display.
- When one of the above error messages appears, you can press ESC, ◁, or ▷ to display your original specification. Make any necessary changes and try again. If you don't want to try again, press CLEAR to clear the error message.

4. Scroll through the index display item-by-item using △ and ▽. You can also scroll to the next page of items by pressing SHIFT △ or SHIFT ▽.
5. When the entry of the data item you are looking for is in the top line (second line in the Schedule Keeper Mode) of the display, press DISP CHNG to switch to the full data display.

Notes

- Note the following when searching for a date in the Reminder Mode.
- When searching for an annual reminder, be sure to input both the month and date. To search for an annual reminder for October 5, input 1 0 TIME/DATE 5
- When searching for a monthly reminder, be sure to input SHIFT SPACE for the month.
- When searching for a daily reminder, input SHIFT SPACE for both the month and the date.
- Note the following when searching for a time in the Schedule Keeper Mode.

- To search for a starting time of 10:30 AM for example, input: 1 0 ▷ 3 0. This will recall all appointments that start at 10:30 AM.
- To search for an item using both a starting time and ending time, such as 10:30 AM to 11:30 AM, input: 1 0 ▷ 3 0 ▷ 1 1 ▷ 3 0. This will recall all appointments that start at 10:30 AM and end at 11:30 AM.
- Note that you cannot search for an item using the ending time only.
- When you search the Schedule Keeper Mode for text data, matching Reminder Mode annual and monthly reminders are also recalled.

To locate data using mode search

Use the same procedures as described under "To locate data using initial character search," but press SHIFT SEARCH to start the search. Note that mode search, however, recalls all data items in the mode that contain the characters you specify anywhere within their data (no just as the initial characters).

Notes

- The following shows how data is recalled by a mode search in the Schedule Keeper Mode when you specify a time as the search data.

Data Stored in Memory:

10:00 AM	10:30 AM — 12:00 PM
10:00 AM — 11:00 AM	11:00 AM
10:30 AM	

Mode Search Specification (specific time): 10:30 AM

Items found:
10:00 AM — 11:00 AM
10:30 AM
10:30 AM — 12:00 PM

Mode Search Specification (time range): 10:00 AM — 11:00 AM

Items found:
10:00 AM
10:00 AM — 11:00 AM
10:30 AM
10:30 AM — 12:00 PM

Editing, Deleting, and Copying data

Use the procedures described here to edit, delete and copy data.

To edit a data item

1. Enter the mode you want to edit a data item.
2. Use index search, initial character search, or mode search to find the data item you want to edit.
3. Move the entry of the data item you want to edit into the top line (second line in the Schedule Keeper Mode) of the index display.
- At this point, you may want to switch to the full data display by pressing **DISP CHNG**. The following steps are the same regardless of whether you are continuing from the index display or the data display.
4. Press **FUNC**.
5. Press **1** to select ITEM EDIT.
- To clear the function menu without selecting anything, press **ESC**.
6. Make any changes you want.
- To cancel the editing operation without making any changes, press **ESC** or **CLEAR**.
7. After making the changes you want, press **SET** to store the data item with its new changes.

To delete a single data item

1. Enter the mode you want to delete a data item.
2. Use index search, initial character search, or mode search to find the data item you want to delete.
3. Move the entry of the data item you want to delete into the top line (second line in the Schedule Keeper Mode) of the index display.
4. Press **FUNC**.
5. Press **2** to select ITEM DELETE.
- To clear the function menu without deleting anything, press **ESC**.
6. Press **SET** to clear the data item you selected or **ESC** to abort the operation without deleting anything.
- Remember that the delete operation cannot be undone.

To delete all data items in a mode

Important!
Use the following procedure to delete all data items in the Telephone Directory, Memo Mode, and Reminder Mode. To delete multiple data items in the Schedule Keeper Mode, see the procedure under "To delete multiple data items in the Schedule Keeper Mode."

1. Enter the mode where you want to delete all data items.
2. Press **FUNC** twice to display the second function menu.
3. Press **2** to select ALL DELETE.
- To clear the function menu without deleting anything, press **ESC**.
4. Press **SET** to delete all data items in the current mode or **ESC** to abort the operation without deleting anything.
- Remember that the delete operation cannot be undone.

To delete multiple data items in the Schedule Keeper Mode

1. Enter the Schedule Keeper Mode.
2. Press **FUNC** twice to display the second function menu.
3. Press **2** to select ALL DELETE.
- To clear the function menu without deleting anything, press **ESC**.

- Multiple item delete in the Schedule Keeper Mode always starts with January 1, 1901. You must specify the date up to which you want items deleted.
4. Input the year up to which you want to delete Schedule Keeper data and press **DATE/TIME**.
5. Input the month and press **DATE/TIME**.
6. Input the date and press **DATE/TIME**.
7. Press **SET** to delete all Schedule Keeper data items from January 1, 1901 up to the date that you specified above, or **ESC** to abort the operation without deleting anything.
- Note that the above operation does not affect Reminder Mode annual and monthly reminders that appear in the Schedule Keeper Mode displays.
- Remember that the delete operation cannot be undone.

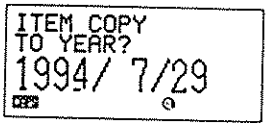
To move a Schedule Keeper data to a different date

1. Enter the Schedule Keeper.
2. Use index search, initial character search, or mode search to find the data entry that contains the data you want to move.
- You cannot use this procedure to edit Reminder Mode data.
3. Move the data you want to edit into the second line of the index display.
4. Press **FUNC** twice to display the second function menu.
5. Press **3** to select DATE CHANGE.
- To clear the function menu without selecting anything, press **ESC**.
6. Input the year of the date and press **DATE/TIME**.
7. Input the month of the date and press **DATE/TIME**.
8. Input the date and press **DATE/TIME** to move the data and return to the Schedule Keeper, with the display showing the date you specified.
9. After making any changes you want in the data, press **SET** to store the data entry.

To copy a data item

The Copy Function lets you duplicate selected data. This function helps to cut down input time when you have multiple data items with similar data. You simply copy the original and then make any necessary changes to create a new data item.

1. Enter the mode you want to copy a data item.
2. Search for and display the data you want to copy.
3. Press **FUNC**.
4. Press **3** to select ITEM COPY.
- At this time, the copy of the data you selected in step 2 above appears, along with the cursor.
- If you are copying Schedule Keeper data, the following screen appears at this point to ask you to specify the date where the data should be copied to.



- Input the year, month, and date, following each entry by pressing **DATE/TIME**.

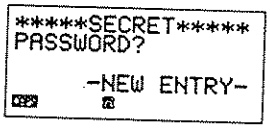
5. Make any changes you want.
6. After you are finished making changes, press **SET** to store the new data in memory.

Using the Secret function

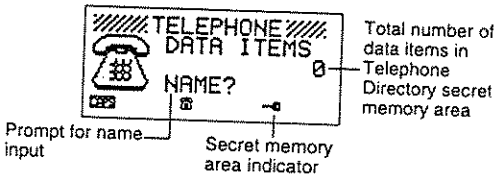
The Secret Function ensures that your personal data is kept private, but providing you with the means to restrict access to those who know your secret password. You can store Telephone Directory, Memo Mode, Schedule Keeper, and Reminder Mode data in the secret memory area.

To create a secret memory area

1. Enter the Telephone Directory, Memo Mode, Schedule Keeper, or Reminder Mode.
2. Press ➡ to display the password input screen.



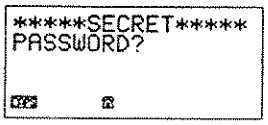
3. Enter the word you want to use as your secret password.
- You can use up to 48 letters, numbers and symbols in a password.
4. Press ➡ again to store the password.
- The following shows an example display for the Telephone Directory.



5. While in the secret memory area, you can change modes, input data, edit data, recall data, and delete data using the procedures explained under each mode in this manual.
6. To exit the secret memory area (and return to the open memory area), press ➡.
- At this time, the "➡" indicator disappears from the display.

To enter an existing secret memory area

1. Enter the Telephone Directory, Memo Mode, Schedule Keeper, or Reminder Mode.
2. Press ➡ to display the password input screen.



3. Enter the password.
4. Press ➡ again to enter the secret memory area for the mode you selected in step 1 above.
- If the password you enter in step 3 does not match the one that is registered, the message "PASSWORD MISMATCH!" appears.

To edit an existing password

1. While in the secret memory area, press **CLEAR**, followed by ➡ to display the currently registered password.
2. Press **FUNC** once to display the first function menu.
3. Press **1** to select PASSWORD EDIT.
- The password reappears on the display with the cursor. Make any changes in the password you want.
4. After editing the password, press ➡ to store it.

To transfer data from the open memory area to the secret memory area

1. While not in the secret memory area, enter the Telephone Directory, Memo Mode, Schedule Keeper, or Reminder Mode.
2. Search for and display the data you want to move.
3. Press **FUNC** twice to display the second function menu.
4. Press **1** to select TO SECRET AREA.
- At this time, a prompt appears on the display asking you for the password registered for the secret memory area.
5. Enter the password.

6. Press ➡.
- If the password you enter in step 5 does not match the one that is registered, the message "PASSWORD MISMATCH!" appears.
7. Press **SET** to transfer the selected data from the open memory area to the secret memory area, or **ESC** to abort the operation without transferring anything.
- When you transfer data to the secret memory area, it is automatically deleted from the open memory area.

To transfer data from the secret memory area to the open memory area

1. Enter the Telephone Directory, Memo Mode, Schedule Keeper, or Reminder Mode.
2. Enter the secret memory area.
3. Search for and display the data you want to move.
4. Press **FUNC** twice to display the second function menu.
5. Press **1** to select TO OPEN AREA.
6. Press **SET** to transfer the selected data from the secret memory area to the open memory area, or **ESC** to abort the operation without transferring anything.
- When you transfer data to the open memory area, it is automatically deleted from the secret memory area.

PART 4

Timekeeping Functions

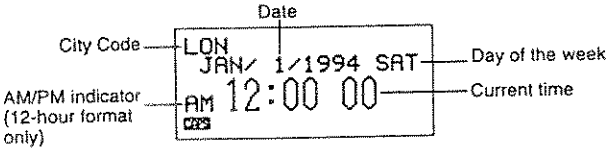
Using the Home Time function

The Home Time function shows you the current time and date in the time zone you preset as your Home Time zone. You also can set a daily alarm that sounds at the same time each day.

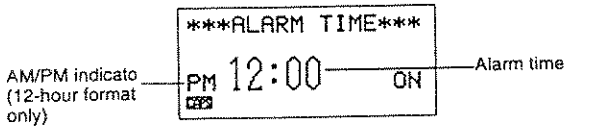
About Home Time displays.....

There are two types of Home Time displays.

Home Time Display



Alarm Display



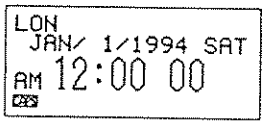
Use **DISP CHNG** to switch between the Home Time display and the Alarm display.

To display the Home Time

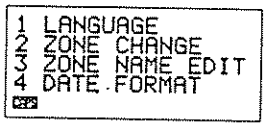
Press **HOME/WORLD** to display the current Home Time.

To set the Home Time zone

1. Press **HOME/WORLD** to display the current Home Time.



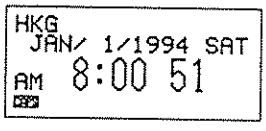
2. Press **FUNC** twice to display the function menu for the ZONE CHANGE operation.



3. Press **2** to select ZONE CHANGE.

- The current zone flashes on the World Map display. Its city code is also shown.
- You can edit city code names. See "To edit a city code name".

4. Use the ◁ and ▷ cursor keys to move the flashing time zone on the World Map. Note that the city code changes as you do.
5. When the time zone that you want for the Home Time is flashing (and the city code you want is shown on the display), press **SET** to register the new zone.



To set the Home Time

1. Display the current Home Time.
2. Press **FUNC** once to display the function menu for the HOME TIME SET operation.
3. Press **1** to select HOME TIME SET.
- The current hour setting on the display flashes because it is *selected*.

4. Use the ◁ and ▷ cursor keys or **DATE/TIME** to move the flashing selection around the Home Time display. When any number is selected (flashing), you can change it by entering a new value.
- You can change the Home Time setting even if summer time (DST) is selected.
- Use 12-hour format if the Home Time is set for 12-hour format or 24-hour format if the Home Time is set for 24-hour format.
- If you are using 12-hour time format, press **A** to specify AM or **P** to specify PM.
- All illegal input (26 for the hour, 65 for the minutes) is ignored.
- Years can be input within the range of 1901 through 2099.
- You can enter 20th century years using only two digits (94 → 1994). 21st century years must be entered in four digits.

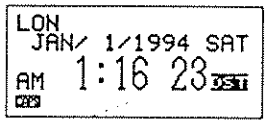
5. After you set the time and date, press **SET** to store them.
- The seconds count of the timepiece resets to "00" when you press **SET**.

To switch the Home Time between 12-hour and 24-hour format

1. Display the current Home Time.
2. Press **FUNC** once to display the first function menu.
3. Press **2** to select 12/24 HOURS.
- The 12-hour/24-hour setting is set up as a *toggle* setting. This means that each time you select the 12/24 HOURS item in the function menu, the Home Time display switches from its present setting to the opposite one.
- The 12-hour/24-hour setting you make is applied for the time displays in the Schedule Keeper, Reminder Mode, Home Time and World Time display.

To switch the Home Time between standard and daylight saving time

1. Display the current Home Time.
2. Press **FUNC** once to display the first function menu.
3. Press **3** to select DST ON/OFF.
- The standard/DST setting is set up as a *toggle* setting. This means that each time you select the DST ON/OFF item in the function menu, the Home Time display switches from its present setting to the opposite one.
- The following shows an example display with the DST indicator (which indicates that DST is on).



To set the Daily Alarm

1. Display the current Home Time.
2. Press **DISP CHNG** to display the current daily alarm setting.
3. Press **FUNC** once to display the first function menu.
4. Press **1** to select ALARM TIME SET.
- The alarm's hour setting on the display flashes because it is *selected*.

5. Use the ◁ and ▷ cursor keys or **DATE/TIME** to move the flashing selection between the hour and the minutes setting. When either value is selected (flashing), you can change it by entering a new value.
- Use 12-hour format if the Home Time is set for 12-hour format or 24-hour format if the Home Time is set for 24-hour format.
- If you are using 12-hour time format, press **A** to specify AM or **P** to specify PM.
- All illegal input (26 for the hour, 65 for the minutes) is ignored.

6. After you set the alarm time, press **SET** to store it.

To switch the daily alarm on and off

1. Press **FUNC** once to display the first function menu.
2. Press **4** to select the SOUND menu item.
3. Use △ and ▽ to select DAILY AL.
4. Use ◁ and ▷ to switch the daily alarm on and off.
5. Press **SET** to store your setting and clear the SOUND menu.

About the daily alarm.....

Once you set the daily alarm, it sounds at the same time every day (as long as the DAILY AL setting is ON). When the daily alarm time is reached, the alarm sounds for 20 seconds and the daily alarm display appears (even if the SF Unit is switched off). Press any key to stop the alarm and return to the display that was shown before the alarm began to sound.

Note the following important points when you are using the daily alarm.

- The daily alarm does not sound if the daily alarm time is reached during data communications.
- The alarm may fail to sound of battery power is too low.

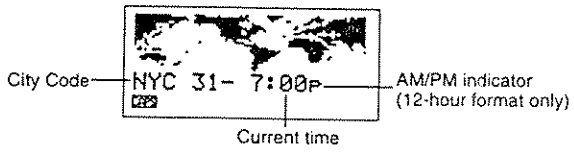
To select the date format

1. Display the current Home Time.
2. Press **FUNC** twice to display the second function menu.
3. Press **4** to select DATE FORMAT.
4. Select a format by entering its number.
- The following shows and example of each format

M/D/Y: JAN/1/1994 SAT
D/M/Y: 1/JAN/1994 SAT
Y/M/D: 1994/1/1 SAT

Using the World Time function

With the World Time function, you can view the current time in any one of 29 time zones around the world. The times and dates that appear in the World Time displays are based on the current Home Time setting.



To display the World Time

While the Home Time is shown, press **HOME/WORLD** to display the World Time.

- The time zone that you last selected when displaying the World Time appears on the display.

To set the World Time zone

1. Display the World Time.
2. Press **FUNC** twice to display the second function menu.
3. Press **2** to select ZONE CHANGE.

- The current zone flashes on the World Map display. Its city code is also shown.

4. Use the ◁ and ▷ cursor keys to move the flashing time zone on the World Map. Note that the city code changes as you do.
5. When the time zone that you want for the World time is flashing (and the city code you want is shown on the display), press **SET** to register the new zone.

To switch a World Time zone between standard and daylight saving time

1. Display the World Time.
2. Use the procedure described to display the World Time zone that you want to switch between standard time and daylight saving time.
3. Press **FUNC** once to display the first function menu.
4. Press **3** to select DST ON/OFF.

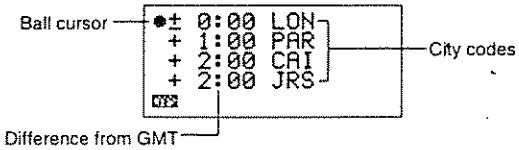
- The standard/DST setting is set up as a *toggle* setting. This means that each time you select the DST ON/OFF item in the function menu, the currently displayed World Time zone switches from its present setting to the opposite one.
- The following shows an example display with the DST indicator (which indicates that DST is on).

To edit a city code name

1. Display the World Time.

- You can also edit a city code name starting from the Home Time display.

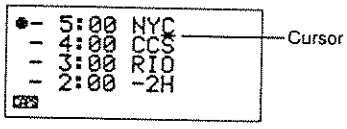
2. Press **FUNC** twice to display the second function menu.
3. Press **3** to select ZONE NAME EDIT.



4. Use the △ and ▽ cursor keys to move the ball cursor up and down until it is located to the left of the time zone whose city code you want to edit.

- Holding down either key moves the ball cursor at high speed.
- The display starts to scroll automatically whenever the ball cursor reaches the top or the bottom of the display.

5. Press the ▷ cursor key, and a cursor appears in the city code of the time zone at which the ball cursor is located.



6. Make any changes you want in the city code where the cursor is located.
7. After editing a city code, press **SET** to store it in memory.

City Code List

City Code	City Name	Time Difference	Other Cities in Zone
- 11	(GMT - 11)	- 11	Midway
HNL	Honolulu	- 10	
ANC	Anchorage	- 09	
LAX	Los Angeles	- 08	San Francisco, Seattle, Las Vegas
DEN	Denver	- 07	El Paso
CHI	Chicago	- 06	Dallas, Mexico City, Houston
NYC	New York	- 05	Washington D.C., Boston,Montreal
CCS	Caracas	- 04	Santiago
RIO	Rio de Janeiro	- 03	Sao Paulo, Buenos Aires
- 2H	(GMT - 2)	- 02	
- 1H	(GMT - 1)	- 01	Azores
LON	London	+ 00	Greenwich Mean Time
PAR	Paris	+ 01	Rome, Madrid, Amsterdam, Berlin
CAI	Cairo	+ 02	Athens, Helsinki, Beirut
JRS	Jerusalem	+ 02	
JED	Jeddah	+ 03	Kuwait, Nairobi
THR	Tehran	+ 03:30	Abadan, Shiraz
DXB	Dubai	+ 04	Abu Dhabi
KBL	Kabul	+ 04:30	
KHI	Karachi	+ 05	
DEL	Delhi	+ 05:30	Bombay, Calcutta, Colombo
DAC	Dhaka	+ 06	
RGN	Yangon	+ 06:30	
BKK	Bangkok	+ 07	Jakarta, Hanoi
HKG	Hong Kong	+ 08	Beijing, Taipei, Singapore, Manila
TYO	Tokyo	+ 09	Seoul, Pyongyang
ADL	Adelaide	+ 09:30	Darwin
SYD	Sydney	+ 10	Guam
NOU	Noumea	+ 11	Port vila
WLG	Wellington	+ 12	Auckland

Using the Calculator

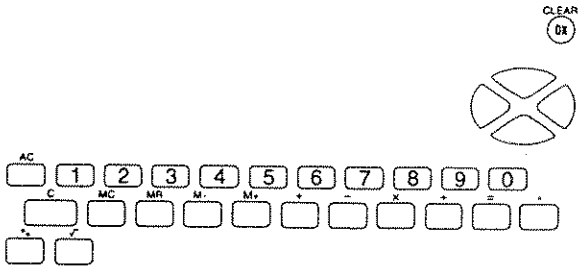
Whenever you enter the Calculator Mode, some of the keys on the SF Unit keyboard take on calculator functions.

To enter the Calculator Mode

To enter the Calculator Mode, select the calculator Mode icon from the main menu screen.

About the Calculator Mode keys....

The following illustration shows the SF Unit keys that are used in the Calculator Mode.



- CLEAR — clears the calculator
- Use the number keys (0 through 9) to enter values. Press • to input a decimal point.
- Use MC, MR, M−, and M+ for calculator memory operations.
  MC — clears the calculator memory.
  MR — recalls the current calculator memory contents.
  M− — subtracts the currently displayed value from the current memory contents. You can also press M− to execute a calculation, with the result being subtracted from the memory contents.

  M+ — adds the currently displayed value to the current memory contents. You can also press M+ to execute a calculation, with the result being added to the memory contents.
- Use +, −, × and ÷ to specify the arithmetic operation that is marked above each key.
- = — executes a calculation and displays its result.
- Use % for percentage calculations.
- Use √ for square root calculations.
- ▷ shifts the displayed value to the right, cutting off the rightmost digit.

To perform calculations

	AC		0.
53 + 123 − 63 =	53 + 123 − 63 =		113.
963 × (23 − 56) =	23 − 56 × 963 =		−31779.
(56 × 3 − 89) ÷ 5.2 + 63 =	56 × 3 − 89 ÷ 5.2 + 63 =		78.19230769
123456 × 741852 =	123456 × 741852 =	E	9.158608051
	C		9.158608051
√3 × 5 =	3 √ × 5 =		8.660254035
12 + 23 =	23 + + 12 =	K+	35.
45 + 23 =	45 =	K+	68.
78 + 23 =	78 =	K+	101.
7 − 5.6 =	5.6 − − 7 =	K−	1.4
2 − 5.6 =	2 =	K−	−3.6
2.3 × 12 =	12 × × 2.3 =	K×	27.6
4.5 × 12 =	4.5 =	K×	54.
45 ÷ 9.6 =	9.6 ÷ ÷ 45 =	K÷	4.6875
78 ÷ 9.6 =	78 =	K÷	8.125
12% of 1500	1500 × 12 %		180.
Percentage of 660 against 880	660 ÷ 880 %		75.
15% add-on of 2500	2500 × 15 % +		2875.
25% discount of 3500	3500 × 25 % −		2625.
What will the selling price and profit be when the purchasing price of an item is $480 and the profit rate to the selling price is 25%?	480 + 25 %		640.
	−		160.
If you made $80 last week and $100 this week, what is the percent increase?	100 − 80 %		25.
80 × 9 = 720	MC 80 × 9 M+	M	720.
−) 50 × 6 = 300	50 × 6 M−	M	300.
20 × 3 = 60	20 × 3 M+	M	60.
480	MR	M	480.

To perform constant calculations

	1. Enter the Calculator Mode.
3 + + 2	2. Enter the calculation, pressing the arithmetic operator key twice. This will causes the "K" indicator to appear on the display to indicate a constant calculation.
	• You can use this constant calculation technique for addition, subtraction, multiplication, and division.
=	3. Press = to display the initial result (in this case, 5).
=	4. Press = again to add 3 to the result (in this case, 5 + 3 = 8)
	• You can repeat the above operation as many times as you like. Each time you press =, the previous result obtained is added to, subtracted from, multiplied by, or divided by the value to the left of the arithmetic operator.
	• To clear a constant calculation, press AC.

To correct errors in calculations

If you enter a wrong value, press C and then enter the correct value.
If you press the wrong arithmetic operator key (+, −, ×, ÷), simply press the correct key before entering anything else.

About calculation errors....

Whenever an error occurs, the indicator "E" appears on the display.

The following conditions all result in errors.

- When the number of digits in the mantissa of an intermediate or a final result exceeds 10 digits.

- When the number of digits in the mantissa of a value stored in memory exceeds 10 digits. In this case, the SF Unit automatically retains the last value stored that did not exceed 10 digits.
- Division by zero.

To clear errors

Press **C** to continue with the same calculation. If you want to clear the calculation and start again, press **AC**.

Performing date calculations

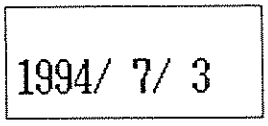
The SF Unit lets you perform calculations involving dates within the range of January 1, 1901 through December 31, 2099. If you try to use dates outside this range, the "E" indicator appears on the display to indicate an error. Note that you can use constant calculation techniques and calculation memory when performing date calculations.

To calculate the number of days between two dates

[+-×÷] 1. Enter the Calculator Mode.

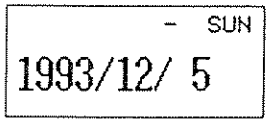
1994 [TIME/DATE] 7 [TIME/DATE] 3 2. Enter the later date, pressing **DATE/TIME** after the year and month entries.

- Here, we will calculate the number of days between December 5, 1993 and July 3, 1994.

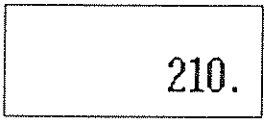


[−] 3. Press − for the subtraction operation.

1993 [TIME/DATE] 12 [TIME/DATE] 5 [TIME/DATE] 4. Enter the earlier date, pressing **DATE/TIME** after the year, month, and date entries.



[=] 5. Press = to display the result.



To calculate the date that is a specific number of days after another date

[+-×÷] 1. Enter the Calculator Mode.

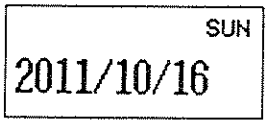
2010 [TIME/DATE] 12 [TIME/DATE] 20 2. Enter the date, pressing **DATE/TIME** after the year and month entries.

- Here, we will calculate the date that comes 300 days from December 20, 2010.

[+] 3. Press + for the addition operation.

300 4. Enter the number of days.

[=] 5. Press = to display the result.



- Use subtraction instead of addition to calculate a date that is a specific number of days before a date.

PART 6

Poker Game

Playing the Poker Game

The Poker Game function lets you play poker against the unit. Relax with this game when you tire of the serious stuff.

Rules applied the Poker Game of this unit

The following describes the rules that are applied for the poker game of this unit.

- 5-card draw poker is the type of game played.
- Before cards are dealt to start each hand, a 1-point ante is automatically added to the pot from you and the dealer. You add to the pot as the game progresses and you and dealer place additional bets, but the initial pot always starts with two points (one each from you and the dealer).
- The unit is always the dealer. You can choose from three different types of dealers, named S. Jack, F. Queen and N. King. Make your selection immediately after entering the Poker Game Mode. Remember that F. Queen likes flushes and N. King prefers straights. The play of S. Jack has no identifiable characteristics.
- You are able to "check" on a bet (bet nothing), and checking will be answered by a bet from the dealer. The dealer never checks or folds in reply to your check.
- You can bet or raise within an amount that is equal to or smaller than the number of points you have remaining.
- The dealer will never place a bet or raise a bet by an amount that is greater than the number of points you have remaining. This means that if you bet all your points, the most the dealer will do is call the bet. If you run out of points on the first round of betting (before you draw cards), the cards are opened immediately following the draw without a second round of betting.
- When you place your initial bet, the dealer replies with a fold, call, or raise. In the case of a raise, you have the option of calling, folding or raising back. If you fold, the dealer collects anything in the pot.
- If your hand and the dealer's hand are identical, it is a tie, and all points that you bet during that hand are returned to you.
- You start out with 1,000 points. The game continues until you run out of points or you accumulate more than 99,999 points. You can also end the game by pressing the **MENU** key , **HOME/WORLD** key or **ESC** key.

Note

If you are not familiar with poker hands, see "About Poker Hands" on page 75.

To enter the Poker Game Mode

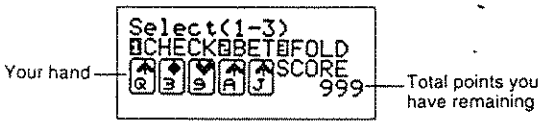
Select the Poker Game icon on the main menu screen, and press **SET**. The initial screen of the Poker Game mode will be displayed.

To start a game

1. When the initial screen of the Poker Game mode is displayed, press **SET** to move to the Dealer selection screen.

2. Press 1, 2 or 3 to select one of the dealers.

- After you select one of the dealers, the game starts immediately by dealing out two hands: one face-up hand for you, and one face-down hand for the dealer.



3. At this point, you have three options: 1 CHECK, 2 BET, 3 FOLD.
- Press 1 to check (not bet). See "To check" to continue the game.
- Press 2 to bet. See "To bet" to continue the game.
- Press 3 to fold (quit the hand). See "To fold" to continue the game.

To check

If you choose CHECK when this option is available, the dealer will then place the first bet (the dealer always bets following your check).

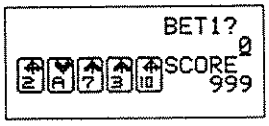
At this point, you are left with the following three options in reply:
1 CALL, 2 RAISE, 3 FOLD.

- Press 1 to call. See "To call" to continue the game.
- Press 2 to raise. See "To raise" to continue the game.
- Press 3 to fold (quit the hand). See "To fold" to continue the game.

To bet

If you choose BET when this option is available, you enter the stage of your betting.

1. Use the number keys to input the number of points you want to bet, and then press **SET**.
- You can use **CLEAR** to clear (reset to 0) the number of points you bet.



2. After you place your bet, the dealer either folds, calls, or raises your bet.

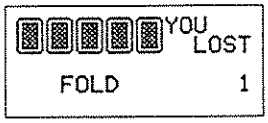
Dealer Call
In this case, the game proceeds to the draw, described under "To draw cards".

Dealer Raise
In this case, the dealer raises your bet, and you are again left with the following three options: 1 CALL, 2 RAISE, 3 FOLD.

Dealer Fold
In this case, the dealer loses and the points in the pot are added to your remaining point total. Press any key besides **MENU**, **HOME/WORLD** or **OFF** key to play the next hand, or **ESC** to return to the Game initial screen.

To fold

If you choose FOLD when this option is available, you will quit your hand. Of course, this means you lose, and so the amount in the pot is deducted from your point total.



- Press any key besides **MENU**, **HOME/WORLD** or **OFF** key to play the next hand.
- Press **ESC** to return to the Game initial screen.

To call

If you choose CALL when this option is available, you proceed to one of the following status:

- If this is the first round of betting, a call by you automatically deducts the amount of the dealer's bet from your points and places it in the pot. Play then advances to the draw.
- If this is the second round of betting, a call by you automatically deducts the amount of the dealer's bet from your points and places it in the pot. The dealer's cards are then opened and the hand is decided based on your cards and the delaer's cards.

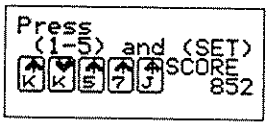
To raise

If you choose RAISE when this option is available, you can raise dealer's bet.

1. Use the number keys to input the number of points you want to raise, and then press **SET**.
- You can use **CLEAR** to clear (reset to 0) the number of points you raise.
2. After you place your raise, the delaer either folds, calls, or raises back.

To draw cards

1. After the first round of betting, the game proceeds to the draw.



2. Use the number key 1 to 5 to select the cards you want to throw away. Each time you press a number key, the corresponding card disappears from the display. If you change your mind about a card after it is gone from the display, press its number key again to make it reappear.
- You can decide to change no cards (by not pressing any number key in this step), or all your cards (by clearing all your existing cards from the display).
3. After you select the cards you want to throw away, press **SET** to complete your draw. The cards you threw away in step 2 (if any) are replaced with new ones.
4. Next the dealer draws cards, and the game proceeds to the next round of betting, where you are again presented with three options: 1 CHECK, 2 BET, 3 FOLD.
5. If neither you nor the dealer folded, the final screen opens up both hands and declares who won. The points in the pot are then given to the winner, and you can press any key besides **MENU**, **HOME/WORLD** or **OFF** to play the next hand, or **ESC** to return to the Game initial screen.

To change dealers

If you want to changer dealers during a game, press the **ESC** key to return to the initial screen and then select a new dealer as described under "To start a game" on page 71.

How the game ends

The game continues until you exit it (by pressing **ESC**, **MENU** or **HOME/WORLD**), until you run out of points, or until you accumulate more than 99,999 points.

About Poker Hands

The following is a ranking of the possible poker hands.

1.	Royal flush	♠10	♠J	♠Q	♠K	♠A
2.	Straight flush	♥7	♥8	♥9	♥10	♥J
3.	Four of a kind	♣A	♦A	♠A	♥A	♥7
4.	Full house	♣5	♦5	♠Q	♦Q	♥Q
5.	Flush	♣2	♣5	♣8	♣10	♣J
6.	Straight	♣2	♦3	♣4	♥5	♠6
7.	Three of a kind	♠10	♦10	♣10	♥2	♥7
8.	Two pairs	♠10	♦10	♣3	♥3	♥6
9.	One pair	♠10	♦10	♣3	♥5	♥6
10.	High card	♠10	♦A	♣3	♥5	♥6

- When both hands contain royal flushes, the hand is a tie.
- When both hands contain straight flushes, the hand whose straight flush ends with the highest card wins. When both hands end with the same card, the hand is a tie.
- When both hands contain four of a kind, the hand with the higher four of a kind wins.
- When both hands contain full houses, the hand whose full house contains the higher three of a kind wins.
- When both hands contain flushes, the hand whose flush contain the highest card wins. When the high cards in both hands are the same, the hand is decided by the next highest card, and if necessary by the next highest card, and so on.

- When both hands contain straights, the hand whose straight ends with the highest card wins. When both hands end with the same card, the hand is a tie:
  A-K-Q-J-10 is the highest straight.
  5-4-3-2-A is the lowest straight.
  Q-K-A-2-3 is not a straight.

- When both hands contain three of a kind, the hand with the higher three of a kind wins.
- When both hands contain two pairs, the hand with the highest pair wins. When both hands have the same highest pair, the hand is decided by the rank of the other pair. When both hands have the same two pair, the hand is decided by the highest of the one unmatched card.
- When both hands contain one pair, the hand with the high pair wins. When both hands have the same pair, the hand is decided by the highest of the three unmatched cards, and if necessary by the next highest unmatched card, and so on.
- When both hands are made up of five unmatched cards, the hand with the highest card wins. When the high cards in both hands are the same, the hand is decided by the next highest card, and if necessary by the next highest card, and so on.

PART 7
Data Communications

Data communications capabilities let you transfer data between two CASIO SF Units, or between the SF Unit and a personal computer. You can perform such operations in the Telephone Directory, Memo, Schedule Keeper, Calendar, or Reminder mode.

Setting Up for Data Communications

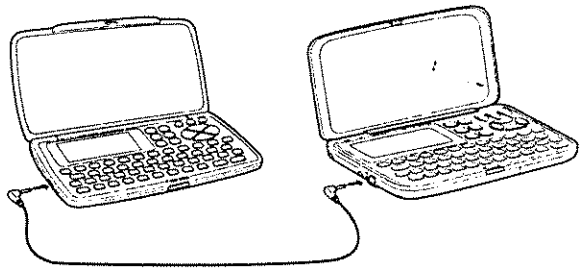
The following describes what you should do to set up for data communications between two SF Units or between the SF-4400/SF-4600B and a personal computer.

To connect the SF-4400/SF-4600B to another SF Unit

1. Make sure that the power of both units is switched off.
2. Remove the covers from the data communications jacks on the two SF Units.
3. Connect the two units using the SB-62 cable.

Important!

- You cannot perform data communications with the CASIO SF-A Series of SF Units (SF-A10, etc.).
- Be sure to replace the connector covers on the SF Units when you are not performing data communications.



Performing data communications between on SF Unit and a personal computer

Note that the optionally available FA-120 V3.50d Interface Unit is for data communications between the SF-4400/SF-4600B and a personal computer. Though the FA-100 and FA-150 Interface Units can also be used for data communications, the software that comes with these interface units is unable to transfer Reminder data.

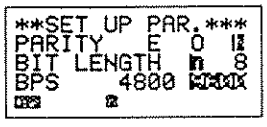
To connect the SF Unit with a personal computer

1. First, ensure that the power of the SF Unit and the personal computer is switched OFF.
2. Connect the personal computer to the FA-120 Interface Unit.
3. Remove the connector cover from the connector terminal of the SF Unit.
- Be careful not to lose the connector cover. It should be replaced in the connector terminal whenever the cable is disconnected.
4. Connect the SF Unit to the FA-120 Interface Unit.
5. Switch the power of the personal computer ON, followed by the SF Unit.
- When data transfer operations are complete, switch power off in the sequence; SF Unit and then personal computer.
  Next, disconnect the units.
- The above operation is based on the FA-120 V3.50d Interface Unit. For Information on using the FA-100 or FA-150, consult the Owner's Manuals that come with these interface units.
- **For details on computer hardware requirements, see the communications software manual.**

To set the SF Unit hardware parameters

1. Press **FUNC** twice to display the second function menu.
- You can perform the above operation in the Telephone Directory, Memo Mode, Schedule Keeper, Calendar or Reminder.
2. Press **4** to select DATA COMM.

3. Press **3** to select SET UP PAR.



- The highlighted items on the display are the parameters that are currently set.
- The PARITY parameter is flashing because it is *selected*.
4. Use the △ and ▽cursor keys to change the selected parameter on the display.
5. Use the ◁ and ▷ cursor keys to change the highlighted setting of the currently selected parameter.
6. When the parameters are set the way you want them, press **SET** to store them in memory.

About communications parameters....

Communications parameters make it possible for two communicating units to understand each other. The following explanations are provided for your information only. The only thing you need to remember is that the parameters of the send unit and the receive unit must be identical. Otherwise you will not be able to transfer data successfully.

Parity
Parity is used for error detection during data exchanges. You can set the SF Unit parity as even (E), odd (O), or none (N).

Bit Length
The bit length parameter states how many bits are to be used for each character. You can set the SF Unit bit length as 7 bits or 8 bits.

BPS
The letters "BPS" stand for "bits per second," and this setting represents the speed at which data is sent. The SF Unit lets you set a speed of either 4800 or 9600.

To set up the SF Unit to receive data

1. While an initial screen is displayed, press **FUNC** twice to display the second function menu.
- You can perform the above operation while the intial screen of the Telephone Directory, Memo Mode, Schedule Keeper, Calendar, Reminder is displayed.
- If you want the received data to be stored in the secret area, you should also enter the secret area at this point. If you are in the open area on the receiving unit, received data is stored into the open area.
2. Press **4** to select DATA COMM.
3. Press **2** to select RECEIVE.

- This message indicates that the receive unit is standing by for data. Perform the required procedures to start sending data from another SF Unit (see owner's manual for details) or a personal computer (see the Interface Unit manual for details).
- To abort the receive operation at any time, press **ESC**.
- This procedure is the same regardless of whether the data is received from another SF Unit or from a personal computer.
4. The display changes to the following once the SF Unit starts receiving data.

Receive data item count

- The number of data items received is counted on the display.
- If an error occurs during the receive operation, the message "TRANSMIT ERROR!" appears on the display. Press **ESC** to clear the error message.
- Received data is added to the data already stored in memory. If the memory becomes full during the receive operation, the message "MEMORY FULL!" appears and data transfer stops. Press **ESC** to clear the error message.

- Some SF Units have modes (such as a Business Card Library or To Do list) that are not included with this unit. Data from such modes cannot be received by this unit.
- The Schedule Keeper of some SF Units is capable of storing multiple-date data items. Whenever you transfer such a data item to the SF Unit, it is automatically converted to a single-date data item. The date used is the one that starts the original multiple-date data item.
- If an alarm (Daily Alarm, Schedule Alarm or Reminder Alarm) is reached while data is being received, the alarm does not sound until the data receive operation is complete.
- Some SF Unit models have a mark protection feature to protect against accidental erasure of data. This unit does not feature mark protection, and so such data is received by disregarding the mark protection.

Sending Data

This section tells you how to operate the SF Unit to send data to another SF Unit or to a personal computer. There are a number of possible procedures you can use, depending on the mode and how many data items you want to send. Note that the following information is for the SF Unit only. Consult with your owner's manuals for the correct operation of your other SF Unit or personal computer.

About data transfer types....

There are a number of different ways you can transfer data.

• One Data Item
This transfer method lets you send a single Telephone Directory, Memo Mode, Reminder Mode or Schedule Keeper item from the SF Unit.

• Mode Data Items
This method is used to send all data items stored in the Telephone Directory, Memo Mode, or Reminder Mode from the SF Unit.
With the Schedule Keeper, this procedure can be used to send all the data stored in a specific period (from one date to another).
For the Calendar Mode, this procedure makes it possible to send all the highlight data in a specific period (from one month to another).

• Month Data
This method lets you send the highlight data for a specific month.

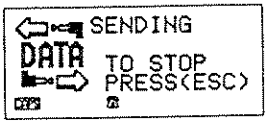
• All Data Items
With this method, you can send all data items stored in the Telephone Directory, Memo Mode, Reminder Mode, Schedule Keeper, and the Calendar from the SF Unit.

Note

- If an alarm (Daily Alarm, Schedule Alarm or Reminder Alarm) is reached while data is being sent, the alarm does not sound until the data send operation is complete.

To send all data items

1. While an initial screen in displayed, press **FUNC** twice to display the second function menu.
- You can perform the above operation while the intial screen of the Telephone Directory, Memo Mode, Schedule Keeper, Calendar, Reminder is displayed.
- Note that this operation sends all open memory area data or all secret memory area data. Make sure you are in the memory area you want (open or secret) before proceeding.
2. Press **4** to select DATA COMM.
3. Press **1** to select SEND.
4. Press **3** to select ALL DATA.
5. Press **SET** to start the send operation or **ESC** to abort the operation without sending anything.



- Data is sent in the sequence: Telephone Directory, Memo Mode, Reminder Mode, Schedule Keeper, Calendar.
- To abort the send operation at any time, press **ESC**.
- If an error occurs during the send operation, the message "TRANSMIT ERROR!" appears on the display. Press **ESC** to clear the error message.
- Some SF Units do not have modes that are included with this unit. For example, some units do not have a Reminder Mode. Data from a mode cannot be received by an SF Unit unless that SF Unit also has the same mode. When sending data to a personal computer, certain mode data may be disregarded, depending upon the version of software you are using for SF data handling on the personal computer.
6. After the send operation is complete, the display returns to the initial screen of the mode you were in when you started this procedure.

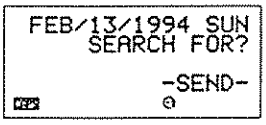
To send one Telephone Directory, Memo Mode, or Reminder Mode item

1. In the Telephone Directory, Memo Mode, or Reminder Mode, press **FUNC** twice to display the second function menu.
- You can perform the following operation while in the open memory area or the secret memory area.
2. Press **4** to select DATA COMM.
3. Press **1** to select SEND.
4. Press **1** to select ONE ITEM.
5. Press △ or ▽ to show an index display of items stored in memory.
- Pressing ▽ starts the index display from the top of the data items, while pressing △ starts from the bottom.
- You could also use initial character search or mode search to locate the data you want to send.
6. Use △ and ▽ to scroll through the index display until the item you want to send is located in the top line.
7. Press **DISP CHNG** to switch to the data display of the selected item.
8. Press **SET** to start the send operation or **ESC** to abort the operation without sending anything.

- To abort the send operation at any time, press **ESC**.
- If an error occurs during the send operation, the message "TRANSMIT ERROR!" appears on the display. Press **ESC** to clear the error message.
- Note that you cannot send Reminder Mode data from the SF Unit to an SF Unit that does not have a Reminder Mode, or to a personal computer.
9. To interrupt a data transfer operation, press **ESC**.

To send one Schedule Keeper entry

1. While the initial Schedule Keeper screen is displayed, press **FUNC** twice to display the second function menu.
- You can perform the following operation while in the open memory area or the secret memory area.
2. Press **4** to select DATA COMM.
3. Press **1** to select SEND.
4. Press **1** to select ONE ITEM.

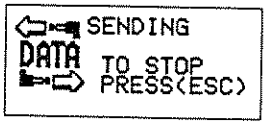


5. Use index search, initial character search, or mode search to find the Schedule Keeper item you want to send.
6. Use △ and ▽ to move the entry you want to send into the second line of the display.
- You cannot send Reminder Mode data listed under a Schedule Keeper date. Use the procedure on page 84 to send a single Reminder Mode data item.
7. Press **DISP CHNG** to switch to the data display of the selected entry.
8. Press **SET** to start the send operation or **ESC** to abort the operation without sending anything.

- To abort the send operation at any time, press **ESC**.
- If an error occurs during the send operation, the message "TRANSMIT ERROR!" appears on the display. Press **ESC** to clear the error message.
9. To interrupt a data transfer operation, press **ESC**.

To send one month of Calendar data (highlights)

1. In the Calendar Mode, press **FUNC** twice to display the second function menu.
2. Press **4** to select DATA COMM.
3. Press **1** to select SEND.
4. Press **1** to select MONTH.
- The calendar for the month that contains the current Home Time date appears on the screen.
5. Display the calendar whose highlights you want to send.
- You can use any of the procedures described on "To specify a month for display in the Calender mode" and "To specify a month and date for display in the Calendar mode" to display the calendar you want.
6. Press **SET** to start the send operation or **ESC** to abort the operation without sending anything.

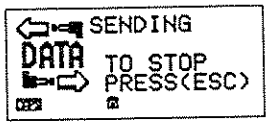


- If the corresponding calendar in the receiving unit already contains highlighted dates, the received data is ignored. You have to clear the corresponding data in the receiving unit before it can receive highlight data.
- To abort the send operation at any time, press **ESC**.
- If an error occurs during the send operation, the message "TRANSMIT ERROR!" appears on the display. Press **ESC** to clear the error message.
7. To interrupt a data transfer operation, press **ESC**.

To send all Telephone Directory, Memo Mode, or Reminder Mode data

1. In the Telephone Directory, Memo Mode, or Reminder Mode, press **FUNC** twice to display the second function menu.
- You can perform the following operation while in the open memory area or the secret memory area.
2. Press **4** to select DATA COMM.
3. Press **1** to select SEND.
4. Press **2** to select MODE DATA.

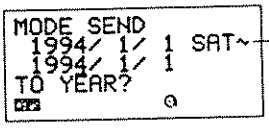
5. Press **SET** to start the send operation or **ESC** to abort the operation without sending anything.



- To abort the send operation at any time, press **ESC**.
- If an error occurs during the send operation, the message "TRANSMIT ERROR!" appears on the display. Press **ESC** to clear the error message.
- Note that you cannot send Reminder Mode data from the SF Unit to an SF Unit that does not have a Reminder Mode, or to a personal computer.
6. After the send operation is complete, the display returns to the initial screen of the mode you were in when you started this procedure.

To send all Schedule Keeper data in a specific period

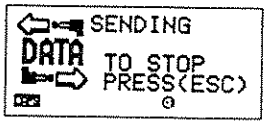
1. Select the Schedule Keeper date that starts the period you want to send.
2. Press **FUNC** twice to display the second function menu.
- You can perform the following operation while in the open memory area or the secret memory area.
3. Press **4** to select DATA COMM.
4. Press **1** to select SEND.
5. Press **2** to select MODE DATA.



Date selected in step 1 above

- At this time, both the start date and the end date for the period are the same as the date you selected in setp 1.
6. Using the ◁ and ▷ keys to move the cursor, input the ending date of the period.
- To send the data from January 1, 1994 to April 1, 1994, for example, press ▷ to move the cursor under the month (1994/1/1) and press **4**.

7. After you specify the ending date, press **DATE/TIME**.
8. Press **SET** to start the send operation or **ESC** to abort the operation without sending anything.

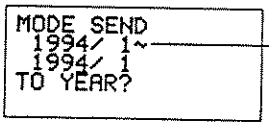


- To abort the send operation at any time, press **ESC**.
- This operation does not send Reminder Mode data listed under a Schedule Keeper date. Use the procedure on page 86 to send all Reminder Mode data item.
- If an error occurs during the send operation, the message "TRANSMIT ERROR!" appears on the display. Press **ESC** to clear the error message.

9. After the send operation is complete, the display returns to the initial Schedule Keeper screen.

To send all Calendar data in a specific period

1. Select the calendar month that starts the period you want to send.
2. Press **FUNC** twice to display the second function menu.
3. Press **4** to select DATA COMM.
4. Press **1** to select SEND.
5. Press **2** to select MODE DATA.

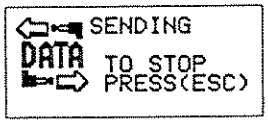


Month selected in step 1, above

6. Enter the year that ends the period of data you want to send and press **DATE/TIME**.
7. Enter the month and press **DATE/TIME**.

- If the month/year you enter comes before the month/year of the calendar you selected in step 1, the starting and ending calendars are switched automatically.

8. Press **SET** to start the send operation or **ESC** to abort the operation without sending anything.



- To abort the send operation at any time, press **ESC**.
- If an error occurs during the send operation, the message "TRANSMIT ERROR!" appears on the display. Press **ESC** to clear the error message.

9. After the send operation is complete, the display returns to the calendar selected in step 1 above.

PART 8

Technical Reference

Keys

Key Cap	Name	Function
ACC	Accent key	Use this key to input accented characters.
CAPS	Caps key	Press this key shift-lock the keyboard between upper-case and lower-case characters.
TIME DATE	Date/Time key	Press this key to enter values that represent hours, minutes, years, months, or dates.
DEL CONT	Delete/Contrast key	• Press this key to delete the character at the current cursor position. Holding down this key deletes characters at high speed. • Press **SHIFT** and then this key when you want to adjust the brightness of the display.
DISP CHNG	Display Change key	Press this key to switch between the index display format and the data display format.
ESC	Escape key	Press this key to interrupt any operation.
FUNC	Function key	Press this key to display function menus.
	Home/World Time key	Press this key to display the current Home Time and World time.

Key Cap	Name	Function
INS CAPA	Insert/Capacity key	• Press this key to open a space at the current cursor position. Holding down this key inserts spaces at high speed. • Press this key following **SHIFT** to display the current status of the memory.
	Secret Key	Use this key to register a password, to access the secret memory area, and to exit the secret memory area.
MENU	Menu key	Press this key to display the main menu screen.
OFF	Off key	Press this key to switch power off.
ON CLEAR	Power On/Clear key	• Press this key to switch power on. • Press this key to clear the display.
SEARCH	Search key	Press this key to start a search for data stored in memory.
SET	Set key	Press this key to store input data into memory.
SHIFT	Shift key	Press this key to temporarily shift the keyboard for one character.
SPACE	Space key	• Press this key to input a space. • Press this key following **SHIFT** to input "–".
SMBL	Symbol key	Press this key to display a menu of symbols on the bottom of the display.
▷	Cursor Right key	Press this key to move the cursor to the right.

Key Cap	Name	Function
◁	Cursor Left key	Press this key to move the cursor to the left.
△	Cursor Up key	Press this key to move the cursor up, or to scroll the display.
▽	Cursor Down key	Press this key to move the cursor down, or to scroll the display.
↵ NEXT	Newline/Next key	• Press this key to create a new line within a data entry. • Press this key following **SHIFT** to complete input of a data entry and move to the next data entry.
A / Z	Letter keys	Press these keys to enter the corresponding letter. Use the **CAPS** and **SHIFT** key to switch between upper-case and lower-case letters. Certain letter keys are also used as calculator keys in the Calculator Mode.
1 / 0	Numeric keys	Press these keys to enter the corresponding number. Following **SHIFT**, these keys are also used for input of certain symbols and punctuation marks.

Symbol Menus

The following shows the symbol menus that become available when you press **SMBL**. Use the △ and ▽ cursor keys to scroll through the menus, and press a number key to select the symbol you want.

§	°	'	+	,	.	/	:
;	<	=	>	?	[	\	]
^	{	¦	}	~	¡	¿	IJ
Æ	Ç	Å	Ø	ß	¶	ij	æ
ç	á	ø	£	¥	Ω	ª	º
×	÷	±	°	²	³	µ	½
¼	¾	ƒ	¦	Fr	←	→	⌐

Accented Characters

To input an accented character, first use one of the following keys to input the accent and then press the key for the letter to be accented.

- Umlaut (Ä, Ë, Ï, Ö, Ü, ä, ë, ï, ö, ü) ..... **ACC Z**
- Acute Accent (Á, É, Í, Ó, Ú, á, é, í, ó, ú) ..... **ACC X**
- Grave Accent (À, È, Ì, Ò, Ù, à, è, ì, ò, ù) ..... **ACC C**
- Circumflex (Â, Ê, Î, Ô, Û, â, ê, î, ô, û) ..... **ACC V**
- Tilde (Ã, Õ, Ñ, ã, õ, ñ) ..... **ACC B**

Storage Capacity

The 64K bytes memory capacity (32K bytes for SF-4400) includes a 61347 bytes user area (28579 bytes for SF-4400). The following shows examples of what this means for the storage of data in each mode.

Telephone Directory

Approximately 2920 (1360 for SF-4400), under the following conditions:
- 8-character name
- 10-character telephone number

Approximately 1460 (680 for SF-4400), under the following conditions:
- 8-character name
- 10-character telephone number
- 20-character address

Memo

Approximately 2780 (1290 for SF-4400), 20-character memos.

Schedule Keeper

Approximately 1910 (890 for SF-4400), under the following conditions:
- 1 item per day, 20 characters per item
- 30 days per month
- Starting time specified, alarm time set

Approximately 2190 (1020 for SF-4400), under the following conditions:
- 1 item per day, 20 characters per item
- 30 days per month
- Starting time specified, no alarm time

Reminder

Approximately 3600 (1680 for SF-4400), under the following conditions:
- 10 characters per item
- Alarm time set

Approximately 4080 (1900 for SF-4400), under the following conditions:
- 10 characters per item
- No alarm time

Auto Sort Sequence

Telephone Directory data items are automatically sorted in alphabetical order according to the first letter in the NAME entry. The following table shows the sequence used for data sorts.

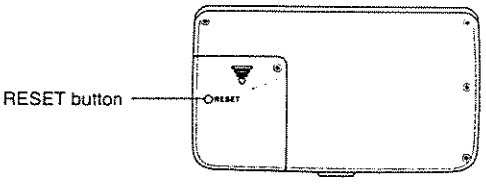
1	§	31	=	61	[	91	{	121	â	151	ij
2	(space)	32	>	62	\	92	¦	122	ê	152	æ
3	!	33	?	63	]	93	}	123	î	153	ç
4	"	34	@	64	^	94	~	124	ô	154	á
5	#	35	A	65	a	95	Á	125	û	155	ø
6	$	36	B	66	b	96	É	126	¿	156	£
7	%	37	C	67	c	97	Í	127	Å	157	¥
8	&	38	D	68	d	98	Ó	128	Ë	158	Ω
9	'	39	E	69	e	99	Ú	129	ï	159	ª
10	(	40	F	70	f	100	À	130	Ö	160	º
11	)	41	G	71	g	101	È	131	Ü	161	×
12	*	42	H	72	h	102	Ì	132	Ã	162	÷
13	+	43	I	73	i	103	Ò	133	Õ	163	±
14	,	44	J	74	j	104	Ù	134	Ñ	164	°
15	—	45	K	75	k	105	Â	135	IJ	165	²
16	.	46	L	76	l	106	Ê	136	Æ	166	³
17	/	47	M	77	m	107	Î	137	Ç	167	µ
18	0	48	N	78	n	108	Ô	138	Å	168	½
19	1	49	O	79	o	109	Û	139	Φ	169	¼
20	2	50	P	80	p	110	¡	140	ß	170	¾
21	3	51	Q	81	q	111	á	141	¶	171	ƒ
22	4	52	R	82	r	112	é	142	¢	172	¦
23	5	53	S	83	s	113	í	143	ä	173	Fr
24	6	54	T	84	t	114	ó	144	ë	174	←
25	7	55	U	85	u	115	ú	145	ï	175	→
26	8	56	V	86	v	116	à	146	ö	176	⌐
27	9	57	W	87	w	117	è	147	ü		
28	:	58	X	88	x	118	ì	148	â		
29	;	59	Y	89	y	119	ò	149	õ		
30	<	60	Z	90	z	120	ù	150	ñ		

Resetting the SF Unit's Memory

Warning!

The following procedure erases all data stored in the memory of the SF Unit. Perform the following operation only when you want to delete all data and initialize the settings of the SF Unit.
Remember – you should always keep copies of important data by writing it down, by transferring it to a personal computer or other SF Unit.

To reset the SF Unit's memory



1. Switch on power and press the **RESET** button with a thin, pointed object.

Warning!
The next step deletes all data stored in the SF Unit's memory. Make sure that you really want to delete the data before you continue!

2. Press **Y*** to reset the memory and delete all data or **N** to abort the reset operation without deleting anything.

* Note that the letter key you press to indicate "yes" depends on the system language, as noted below.

English: **Y** Spanish: **S** German: **J**
French: **O** Italian: **S**

Following the reset operation described above, the Home Time display appears and the SF Unit settings are initialized as noted below.

Home Time:	12-hour format JAN/1/1994 AM/12:00 00
Zone:	London (LON)
World Time:	New York (NYC)
Daily Alarm:	12:00 PM
Menu Mode:	Telephone mode
Language:	English
Sound:	Schedule alarm →ON Reminder alarm → ON Daily alarm → OFF Key → ON
Character input:	CAPS

Message Table

Message	Meaning	Action
NO DATA!	Search operation attempted when no data is stored in memory.	Current search operation cannot be performed.
NOT FOUND!	Data specified in search operation does not exist in memory.	Change specification or cancel search.
MEMORY FULL!	No more room in memory for storage of data.	Delete unnecessary data items from memory.
ALARM TIME ALREADY USED!	Attempt to set a Schedule Keeper alarm time that is already used for another entry.	Set a different alarm time or change the existing alarm time to another one.
ALARM TIME ALREADY PASSED!	Attempt to set a Schedule Keeper alarm time for a time/date that is already passed.	Set a different alarm time (for a future time/date).
SECRET DATA!	Alarm for a secret memory area data item is sounding.	Enter the secret memory area to veiw details of the alarm.
PASSWORD MISMATCH!	Attempt to enter the secret memory area using a password that does not match the one preset for the secret area.	Use the correct password.
TRANSMIT ERROR! STOPPED!	Error during data communications.	Cancel the data communications operation and try again.
DATA ERROR! CONSULT THE OWNER'S MANUAL!	Data corrupted by strong impact, electrostatic charge, etc.	See page 10 of this manual.

Specifications

Model:SF-4400/SF-4600B

Main Modes:

Telephone Directory, Memo, Schedule Keeper, Reminder, Calendar, Home Time, World Time, Calculator and Poker Game.

Data storage:

Storage and recall of telephone, memo, schedule, reminder data; calendar display; secret area; editing; memory status display

Clock:

Worldtime; reminder alarm; schedule alarm; daily alarm; accuracy under normal temperatures: ±3 seconds average

Calculation:

10-digit arithmetic calculations; arithemetic constants (+, −, ×, ÷); independent memory; percentages; square roots; 20-digit approximations; date calculations; other mixed calculations

General:

Display element: 16-column x 4-line LCD
Memory capacity: SF-4400: 32KB (28579 bytes)
SF-4600B: 64KB (61347 bytes)
Main component: LSI
Power supply: 2 lithium batteries (CR2032)
Power consumption: 0.05W
Battery life: Approximately 450 hours continuous operation in Telephone Directory; approximately 380 hours repeating one minute of input and 10 minutes of display in Telephone Directory; approximately 12 months for memory back up

Auto power off: Approximately 6 minutes after last key operation
Operating temperature: 0°C ~ 40°C (32°F ~ 104°F)
Dimensions:
Unfolded: 10.6H × 141W × 159.5D mm ($^{3}/_{8}$"H × $5^{1}/_{2}$"W × $6^{1}/_{4}$"D)
Folded: 12.4H × 141W × 82D mm ($^{1}/_{2}$"H × $5^{1}/_{2}$"W × $3^{1}/_{4}$"D)
Weight: 98.2g (3.5 oz)